

The University of Chicago

THE RAILROAD SENIORITY SYSTEM
HISTORY, DESCRIPTION, AND EVALUATION

A DISSERTATION SUBMITTED TO THE FACULTY
OF THE SCHOOL OF BUSINESS IN CANDIDACY
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

1941

By
DAN H. MATER

Private Edition, Distributed by
THE UNIVERSITY OF CHICAGO LIBRARIES
CHICAGO, ILLINOIS

Reprinted from
THE JOURNAL OF BUSINESS, Vols. XII (April, 1939), XIII (October, 1940),
XIV (January, 1941), XIV (April, 1941), XIV (October, 1941).

The University of Chicago

THE RAILROAD SENIORITY SYSTEM
HISTORY, DESCRIPTION, AND EVALUATION

A DISSERTATION SUBMITTED TO THE FACULTY
OF THE SCHOOL OF BUSINESS IN CANDIDACY
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

1941

By

DAN H. MATER

Private Edition, Distributed by
THE UNIVERSITY OF CHICAGO LIBRARIES
CHICAGO, ILLINOIS

Reprinted from

THE JOURNAL OF BUSINESS, Vols. XII (April, 1939), XIII (October, 1940),
XIV (January, 1941), XIV (April, 1941), XIV (October, 1941).



THE DEVELOPMENT AND OPERATION OF THE RAILROAD SENIORITY SYSTEM

DAN H. MATER¹

INTRODUCTION

SENIORITY has received increased attention by union officials in the past few years. In the railroad industry—the first industry in which the seniority system was formally developed to any considerable extent—the depression necessitated many adjustments which, in turn, forced many changes in the seniority provisions. In the many nonrailroad industries and firms in which collective agreements have not been the custom—and hence in which seniority in its more technical sense has not been recognized—both A. F. of L. and C.I.O. labor factions of late have placed the seniority principle among the first concessions to be wrung from the employers.²

Where seniority is fully incorporated into a personnel system, it is regarded by both the employer and the employees as one of the most important elements of the collective agreement.³ Among

¹ Research fellow in the School of Business, University of Chicago.

² Raymond J. Walsh, *C.I.O. Industrial Unionism in Action* (New York: W. W. Norton & Co., 1937), p. 230. See also J. Douglas Brown, *The Seniority Principle in Employment Relations* (Princeton: Princeton University, 1938); and Alec H. Mowatt, "Seniority in Collective Agreements," *Monthly Labor Review*, Vol. XLVII, No. 6 (December, 1938). Each of the last two studies describes the general principles of seniority, quotes clauses from collective agreements in nonrailroad industries, and points out the lately increased attention which has been given to seniority in nonrailroad industries. At the Sixth Annual Midwest Conference on Industrial Relations at the University of Chicago, November 3, 1939, the topic for discussion at Round Table D was "Seniority, Its Problems and Possible Solution." During the early part of the discussion one of the panel members, speaking from a lifelong experience in bargaining with union leaders, humorously but with evident agreement from the floor remarked that he had heard more about seniority during the last three years than he had during the first hundred.

³ Harry Henig, *The Brotherhood of Railway Clerks* (New York: Columbia University Press, 1937), pp. 8, 47.

union officials and among those employees who are thoroughly union conscious there are many who consider the seniority principle to be scarcely less important than the wage and hour clauses of the collective agreement.

Some indication of the importance of seniority in the railroad industry may be seen by noting the extent to which the railroad collective agreements contain seniority. As of June, 1939, there were in effect 4,061 railroad collective agreements. These agreements stipulated the working conditions of approximately all of the railroad employees in this country below the management level.⁴ While it has not been possible in this study to examine all of these agreements, neither inquiry nor examination disclosed a single agreement which did not contain seniority provisions.

Something of the importance of seniority in an agreement is indicated also by the proportion of it which is devoted to seniority. In railroad agreements this proportion ranges from 20 to 30 per cent. In the long and complicated agreements such as are found usually in the train and engine services the percentage is a little higher than it is in the less complicated agreements found typically in the other branches of the railroad service.

In spite of the importance of seniority as a working condition it seems that relatively few people, even among those who work with or under the system, realize its full significance. One gets the impression usually from conversations with railroad people that seniority is as inseparable a part of a railroad as wheels and whistles. Except for the grievances arising from its interpretation and application, most employees take seniority for granted;⁵ they give little thought to the causes of its development, and they are little prone to consider its social gains and social costs. Of course, while railroad and union officials have a very intimate knowledge of the operation of seniority, their very intimacy with the subject serves to make it difficult for them to see the system in perspective. And the academicians—from whom it might be most ex-

⁴ *Fifth Annual Report of the National Mediation Board* (Washington: Government Printing Office, 1939), pp. 25-27.

⁵ "What Are Seniority Rights Worth?" *Railway Clerk*, XXVIII (January, 1929), 7-8.

pected that a discussion of philosophical perspective should emanate—until of late have had very little to say on the subject.

The lack of literature is probably due to the fact that, on the one hand, few students of transportation have had the time or inclination to consider its labor problems; and, on the other hand, few students of labor have sufficiently familiarized themselves with the vernacular of the railroad “schedules” or collective bargaining agreements to be expert in railroad labor problems. Since seniority has never played as important a part in the working conditions of industry generally as it has in the case of railroad agreements, the subject simply has not received the same degree of attention from writers as have other working conditions.

In fine, although there exist a few worth-while articles on the topic—most of which are of recent date—the history of seniority has not been written, and evaluations of it as a method of job control by employees have been mere claims and counterclaims. The purpose in this part of the study is to trace the development of seniority on the railroads and the reasons therefor.⁶

DEFINITION OF SENIORITY

An employee's seniority is the length of his service with his employer. Where seniority is written into a collective bargaining agreement, this general concept is hedged in by rules which specify the conditions under which seniority may be retained and exercised; on the other hand, the privileges which accrue to an employee on the basis of his seniority are more extensive when this working condition is included in the collective bargaining agreement. But even within collective agreements the foregoing seniority rules and privileges differ widely from industry to industry, union to union, and firm to firm. The kinds and degrees of seniority observance as well as antecedent and related institutions will be discussed later. For the present, such factors will be discussed only to provide a sufficient background against which to trace the development of the railroad seniority system. As a final

⁶ This article is part of a larger study which is in progress on “The Railroad Seniority System.” An earlier article, entitled “Seniority Rights before the Courts,” appeared in the *Journal of Business of the University of Chicago*, XII (April, 1939), 152-74.

step in tracing that development, the railroad seniority system will be described as it exists and operates today.

In some instances an employee automatically obtains an increase in salary with each added period of service; that is, an employee's seniority as measured in units of time is the essence of the value of seniority. Usually, however, the essence of the value of an employee's seniority is the rank which his date of employment occupies relative to that of each of the other employees on the same roster or list. In other words, seniority as measured in units of time is meaningless—especially as it is understood and incorporated in collective bargaining agreements.

An employee's seniority rank improves as employees of higher rank disappear from the roster. In other words, if no one dies, quits, is transferred, discharged, or promoted, and the company does not change the number of employee positions, an employee's seniority rank remains the same and no benefits accrue to him with added length of service. On the other hand, if an employee's rank changes because of any of the above reasons, the opportunity for him to exercise his seniority is created by the same event. Of course, the value of the seniority rank of a given employee is changed if the company increases or decreases the number of employee positions.

The seniority right may be exercised in several ways, depending upon the branch of the railroad service and the phase of job allocation which is involved. In all branches of the railroad service, an employee is promoted on the basis of seniority if there is a formal promotion route; vacancies are filled according to the seniorities of those desirous of filling them; employees are safe from layoffs to the extent that they are senior to other employees; and employees who have been laid off or furloughed are recalled in the order of their seniority rank. There are many variations among railroads and among crafts as to the manner in which these principles are carried out, but for the present these variations and exceptions need not be introduced.

THE ORIGIN OF SENIORITY

In a portion of the study which will appear later, seniority will be dealt with in the light of what anthropologists and sociologists

have had to say concerning the institutions which were antecedents of formal or codified seniority systems. At the present time there is no intent to trace the origin of seniority back farther than the point immediately preceding its first appearance in codified form. In order to deal properly with the origin of the railroad seniority system it is necessary, of course, to reveal to what extent seniority practice was formally recognized before its adoption by the railroad industry.

Seniority before the existence of railroads.—Clearly, while seniority as it exists today in collective bargaining agreements is the work of unions, the idea is not their own invention. It is quite obvious that since the inceptions of the army and the navy of this country, seniority has been in practice; and, furthermore, this practice was adopted from that of the English. The following quotation is a description of the British regiment in the time of the French and Indian War in this country (1756-63): "In a large force each battalion had its permanent position, determined by regimental seniority, in a fixed grouping into brigades. Each brigade, similarly, had its normal place in a fixed 'order of battle.'"⁷

The formal adoption of the seniority rule during the Revolutionary War may be seen from the following quotation:

The colonies considered themselves as allies, but recognized no senior state, so it became necessary to establish some rule for posting them. Washington's solution is found in an order issued at White Plains, July 26, 1778, entered in the Orderly Book of the 1st Pennsylvania Regiment as follows: "As it is necessary for the sake of Regularity that there should be some Fixed General Rule for arranging and disposing the Line of the Army and troops of the different states during the present campaign, they are to take Post according to the relative geographical position of the states to each other, supposing their front to be the ocean. . . ." The relative positions of the states having thus been determined, the precedence of regiments within the "line" of each colony had to be determined, and so we find that boards were convened to settle this point. The basis here was the seniority of the colonels who commanded the regiments when organized; the precedence of the regiments, once fixed, did not change with change of commanders.⁸

⁷ Oliver L. Spaulding, *The United States Army in War and Peace* (New York: G. P. Putnam's Sons, 1937), p. 7.

⁸ *Ibid.*, p. 51. Mr. Spaulding gives as his reference the *Pennsylvania Archives* (2d Ser. XI), pp. 289, 482, 489.

As a matter of fact, it may be gleaned from nearly any history of the navy or army of this country that seniority was a factor to be considered in the army from the time of George Washington and in the navy from the time of John Paul Jones.⁹

Several difficulties stand in the way of determining the first inclusion of seniority in a collective agreement. First, many early unions no longer exist, and records of their accomplishments are meager. Second, the few early unions which still exist have little or no record of any preceding oral agreements which they may have secured. In fact, little is known of the early observance of seniority.¹⁰ Apparently the earliest inclusion of seniority in a written agreement was in the first written railroad agreement; this agreement was between the Brotherhood of Locomotive Engineers and the New York and Hudson River Railroad in 1875.¹¹ The earliest inclusion of seniority in a nonrailroad collective bargaining agreement seems to have been obtained by the New York Typographical Union No. 6 in 1890.¹² The question arises as to what extent, if any, seniority was practiced before it appeared in written agreements; that is, had it been observed previously as a custom, and had it been included in oral understandings between unions and managements. All of the evidence in this respect does not point to the same conclusion.

Seniority as a custom on railroads before written agreements.—On the one hand, most union officials believe that seniority was invented by unions; that is, its inclusion in written agreements was not preceded by custom. For this view there is the supporting evidence—although they do not cite it—that no plaintiff has ever been able successfully to plead before a court that seniority was

⁹ This view has also been expressed to the author in conversations with officers of the U.S. Army and the U.S. Navy.

¹⁰ "What Are Seniority Rights Worth?" *op. cit.*

¹¹ W. Z. Ripley, "Railway Schedules and Agreements," Appendix VI of *Report of the Eight-Hour Commission* (Washington: Government Printing Office, 1918), p. 270.

¹² George A. Stevens, *New York Typographical Union No. 6* (Albany: J. B. Lyon Co., 1913), p. 529. Prepared under the direction of John Williams, commissioner of labor of the state of New York.

customary prior to its inclusion in a written agreement between his management and the union representing his craft.¹³

On the other hand, there is more and varied evidence to the contrary. The first type of evidence is again expert opinion. Alec H. Mowatt has stated that "the general principle of seniority is as old as the employer-employee relationship itself."¹⁴ McIsaac has said: "In fact seniority was probably in effect on some roads . . . before the first telegraphers' schedules were established."¹⁵ Ripley has noted that the records of the investigation of the strike in 1877 by the engineers on the Boston and Maine Railroad show that there existed a definite custom of laying off junior employees first when forces were reduced.¹⁶

Interviews were secured with a few men in Chicago who had begun their railroad careers as early as 1880. The consensus of opinion of these individuals was that seniority had been observed even in the absence of a union but in a rather desultory fashion.

In biographies one occasionally finds such illuminating phrases as "He never would take a passenger train . . . even though entitled to it by right of succession."¹⁷ This was about 1859.

And, finally, there are some union officials who believe that not only was seniority in practice before its inclusion in written agreements, but, more important still, unsatisfactory seniority observance was one of the factors which brought about the unions. In a letter to the author President Johnston of the Brotherhood of Locomotive Engineers stated:

. . . Seniority and the exercising of such was one of the causes which brought about the organizing of the Brotherhood of Locomotive Engineers in 1863, and while we do not possess any written documents or agreements

¹³ Dan H. Mater, "Seniority Rights before the Courts," *Journal of Business of the University of Chicago*, XXII (April, 1939), 163. In *Piercy v. L. & N. R. Co.*, 198 Ky. 477, 248 S.W. 1042 (1923), it may have been that the court gave some weight to the length-of-service principle.

¹⁴ Mowatt, *op. cit.*, p. 1250.

¹⁵ Archibald M. McIsaac, *The Order of Railroad Telegraphers* (Princeton: Princeton University Press, 1933), p. 256.

¹⁶ Ripley, *op. cit.*, p. 307. He gives as his reference the official report of the strike by the Massachusetts Railroad Commission.

¹⁷ D. C. Prescott, *Early Day Railroading from Chicago* (Chicago: David B. Clarkson, 1910), p. 97.

covering seniority, or the manner in which it was practiced prior to the organizing of the Brotherhood of Locomotive Engineers, information available indicates that seniority among engineers was practiced to some extent. . . .

It would seem that another type of evidence concerning any preagreement recognition of seniority is whether or not a period of time usually elapsed between the dates when the various unions were able to obtain their first agreements and the dates when they were able to obtain their first agreements which contained seniority, during which period they either were not desirous of seniority or were unable to overcome the resistance of the managements toward its inclusion. To obtain this information the cooperation of union officials was solicited—most of whom responded wholeheartedly. Table 1 shows the information obtained.

The surprising fact which the table reveals is that, without exception, the first agreement of every union contained seniority. However, there are several minor qualifications which might be noted. First, nearly every union here listed had one or more short-lived predecessors whose records of achievement are lost, still repose in private files, or never were made. Second, the table does not include unions which were established comparatively late; and it may be taken for granted that late unions would have profited by the efforts of the pioneers and would not have had to begin at the beginning, so to speak. Third, it should not be inferred from this table that a union after once having written seniority into an agreement necessarily was able, therefore, to write seniority into its every subsequent agreement. For example, the maintenance-of-way employees first obtained seniority in 1902, but their agreement with the Maine Central Railroad in 1906 specifically stated that the criteria for both promotion and layoff were merit and ability. In other words, every union obtained from each management as favorable an agreement (or revision) as was at the moment possible. And, finally, union officials, since they have always been strongly desirous of having signed agreements, are quite likely not to consider either an oral understanding or an unsigned written agreement as a bona fide agreement. Therefore it is possible that seniority may not have

TABLE 1

THE APPEARANCE OF COLLECTIVE BARGAINING IN THE VARIOUS EMPLOYEE GROUPS IN RELATION TO THE INTRODUCTION OF SENIORITY INTO THEIR AGREEMENTS*

Craft Group (1)	Union (2)	Date Union Was Organized (3)	Date of First Agreement (4)	Date of First Agreement Containing Seniority (5)	Railroad with Which Agreement Was Made (6)
Locomotive engineers†.....	B.L.E.	1863	1875	1875	N.Y.C. & H.R.
Conductors.....	O.R.C.	1868	.....	.....	.....
Locomotive firemen†.....	B.L.F. & E.	1873	1876	1876	I.C.
Boilermakers§.....	I.B.B.I.S.B.	1880	1892	1892	A.T.S.F.; U.P.
Brakemen.....	B.R.T.	1883	1887	1887	C. of N.J.
Trackmen.....	M. of W.	1886	1902	1902	C.P.
Telegraphers||.....	O.R.T.	1886	1892	1892	A.T.S.F.; L.E.S.L.; S.L. & S.F.
Machinists§.....	I.A.O.M.	1888	1892	1892	A.T.S.F.; U.P.
Sheet-metal workers.....	S.M.W.I.A.	1888	.....	.....	.....
Blacksmiths§.....	I.B.B.D.F.	1889	1892	1892	A.T.S.F.; U.P.
Carmen.....	B.R.C.A.	1891	1901	1901	C.P.
Electricians.....	I.B.E.W.	1891	1917	1917	C.M. & St.P.
Switchmen.....	S.H.N.A.	1894	.....	.....	.....
Clerks¶.....	B.R.C.	1898	1906	1906	I.C.
Stationary firemen and oilers.....	I.B.F.O.	1898	.....	.....	.....
Railroad industrial	A.F. of R.W.	1901	.....	.....	.....
Signalmen.....	B.R.S.A.	1901	1907	1907	N.Y.N.H. & H.

* The dates of organization (column 3) were taken from the *Handbook of American Trade Unions*, 1936 edition, Bulletin No. 618 of the Bureau of Labor Statistics, prepared by E. M. Stewart. Unless otherwise indicated the information in columns 4, 5, and 6 were obtained by letters from officials of the unions. Where blanks occur, requests were unanswered, or records had been destroyed, lost, or were otherwise unavailable.

† Ripley, *op. cit.*, p. 270.

‡ D. B. Robertson, president of the firemen's organization, wrote that their first agreement was obtained jointly with the engineers from the Central of New Jersey Railroad in 1887. However, the author has examined a firemen's agreement containing seniority which was made with the Illinois Central Railroad in 1876.

§ H. W. Brown, acting international president of the machinists' organization, supplied the information by letter and by a reprint of an article by A. O. Wharton, president, entitled *Fifty Years of the Machinists Union*, which had originally appeared in the May, 1938, *Labor Information Bulletin* of the Bureau of Labor Statistics. This article states that the first agreement of the machinists' organization was obtained jointly with the boilermakers' and blacksmiths' organizations from the Santa Fe and Union Pacific railroads simultaneously.

|| McIsaac, *op. cit.*, p. 7, speaks of an agreement with the D. & R. G. Railroad in 1892 and says that possibly an agreement was made with the A. & P. Railroad in 1891. Nothing is known of the contents of these agreements.

¶ Henig, *op. cit.*, p. 21.

been so generally included in any preceding "understandings" between unions and managements as the foregoing table indicates.

Further evidence that there existed some kind of "understandings" previous to the "first" agreements is in the text of nearly every "first" agreement. Although the "canceling" clause (see Art. 7 of the following agreement) sometimes may have been a mere formality, it also may have been more than that in some cases. The first written agreement of which there is any record is a typical "first" agreement and is here reproduced from Ripley's report.

NEW YORK CENTRAL AND HUDSON RIVER RAILROAD

GRAND CENTRAL DEPOT
NEW YORK, Jan. 26th, 1875

The established rate of pay for locomotive engineers of this company as agreed upon this day, to take effect on the 1st day of February, 1875, is as follows:

1. For all passenger and freight engineers $3\frac{1}{2}$ cents per mile run, actual mileage, excepting when the run is under 100 miles, for which \$3.50 per day will be paid.
2. For all engineers of switch and work trains \$3.50 per day, including Sunday, and when required to report for duty.
3. It is understood that the number of engineers are to be kept down to the lowest possible number necessary to perform the work of the company, and in case engineers are dropped from the service of the company by reason of falling off in business, the youngest engineers in the service of the company are to be taken first.
4. This abolishes all pay for Sundays when not actually running, and all lay over, shop, and extra days.
5. When engines in actual service become disabled and are put in the shop for repairs, then the master mechanic shall furnish engineers running such engines with engines to take their place.
6. The time and mileage of engineers shall be computed and carried out separately for each day's work.
7. This shall take the place of all existing agreements.¹⁸

M. J. RICKETT
For Engineers

WM. H. VANDERBILT
President
J. P. CHAMBERS
For Vice-President

¹⁸ Ripley, *op. cit.*, pp. 352-53. In Article 3 the word "youngest" means youngest in point of length of service.

Conclusion as to the origin of seniority.—It seems quite certain from the foregoing evidence that the unions hastened the general acceptance of seniority on railroads; it is unlikely that from the impetus of custom only, seniority would ever have been applied to as many phases of job allocation as it now is. On the other hand, it is equally evident that seniority was not original with the unions: just as many laws are mere codifications of customs, so the working conditions which a union is able to write into its first agreement, instead of being *de novo*, are quite likely to parallel closely the conditions to which employers are then accustomed.

FACTORS WHICH CONTRIBUTED TO AN EXTENSIVE DEVELOPMENT
OF SENIORITY ON RAILROADS EARLIER THAN
IN OTHER INDUSTRIES

An inquiry into the primary reasons for the development of a formal seniority system in the railroad industry earlier than in other industries is tantamount to comparing the conditions which existed in the railroad industry with those in other industries. In other words, if conditions in the railroad industry had not differed materially from those in other industries, there would have been no reason, except chance, for a formal seniority system to have occurred first in the railroad industry. Especially is this significant in view of the fact that the railroad industry was a comparative newcomer among industries. Since seniority did not appear in codified form in the railroad industry until the latter was about fifty years old, and since the development came at a time when major changes were in progress in the railroad industry, it seems logical that those changes must have been responsible, in part at least. The uniqueness of the conditions existing in the railroad industry will be searched, therefore, for the primary causes of the beginnings of the first formal seniority system. It is assumed that, prior to the appearance of codified seniority rules in the railroad industry, railroad employees were no more imbued with the institution of "veneration of elders" and other institutions related and antecedent to that of seniority than were employees of other industries.

Absentee ownership and managership.—Following the depression of 1873—which had largely resulted from a mania of railroad

construction—mergers and combinations occurred in unprecedented numbers.¹⁹ The evils inherent in absentee ownership were heightened by the fact that many of the owners knew little about railroad operation; indeed, many of them were interested only in speculative profits or quick operating profits. Under such conditions of remote supervision by owners who were neither expert in railroad operation nor interested in the long-run welfare of the properties, little could be expected of their hired managers. This situation has been cited as one of the factors which brought the deterioration of the relations between the railroads and the public to such a state that governmental regulation of railroads was instituted.²⁰ It seems logical that under those same conditions employee relations also would have suffered.

An important but little realized effect of the railroad mergers and combinations upon the employee relations of the railroads was that, in spite of the facts that the peak of railroad construction was not reached until 1887 and that traffic continued to increase at a great pace for many decades, the number of higher executive positions decreased relative to the number of employees. In other words, an employee's opportunity to advance above the ranks was reduced. The editor of the principal trade paper in the railroad field noted this trend as early as 1880:

There can be but little doubt, though, that advancement to high positions grows more difficult each year in proportion as the tendency to consolidation of great interests and immense amounts of capital goes on.²¹

A second way in which absentee ownership was responsible for the railroads' poor employee relations was the unrestricted and unsupervised way in which division officials manipulated the wage rates and number of hours of the employees. A story from the biography of a railroad employee will illustrate: It seems that a lesser official of a company was made acting superintendent for the duration of the absence of his superior. The appointee im-

¹⁹ Eliot Jones, *Principles of Railway Transportation* (New York: Macmillan Co., 1929). See the discussion of railroad combination, particularly pp. 325-29.

²⁰ D. Philip Locklin, *Economics of Transportation* (Chicago: Business Publications, Inc., 1938), p. 205.

²¹ "Advancement" (an editorial), *Railroad Gazette*, March 26, 1880, p. 168.

mediately proceeded to try to make a name for himself by a frequently used method: wages were reduced 25 per cent, about a third of the employees were laid off, and a day's work was increased from ten hours to twelve.²² The fact that a complete strike ensued indicates that the official involved was overzealous. However, the action seemed to be typical in principle.

The unbridled manner in which the hired managers exercised their control over the employees resulted also in unequal treatment of the latter. Such treatment generally is some combination of discrimination and favoritism. It is possible, however, for each to exist separately. Furthermore, each can be either personal or impersonal. The important aspects of unequal treatment of employees, however, are, first, the criteria by which management officials segregate employees for favored and discriminatory treatment respectively, and, second, the methods of disseminating such treatment.

There were several criteria in use for segregating employees for favored and discriminatory treatment. Until rather recently a union man was more or less an object of discrimination; conversely, a nonunion man often was favored. Friends and relatives of officials often received favored treatment—usually at the expense of other employees. Other employees suffered discriminatory treatment because they were disliked personally by some official. Much of the unequal treatment of employees was on petty bribery and “stool pigeon” bases. The better paid employees were sometimes discriminated against in favor of other employees in the same class of service but who were receiving lower wage rates. The methods of favoring some and discriminating against others are simple in principle: unequal discipline for equal offenses and unequal reward for equal merit.

The extent of favoritism and discrimination is evidenced by a quotation from the journal of the clerk's union:

In the old days it was not an infrequent occurrence to see inexperienced men brought into an office and put to work at a wage higher than men received who had spent years in the service. Many times have we seen it hap-

²² Henry Clay French (as told to his son, Chauncey Del French), *Railroadman* (New York: Macmillan Co., 1938), p. 146.

pen, that when a job that paid a top wage became vacant a greenhorn would be brought in, put on the job, and men receiving less money required to train him to do the work! Nepotism was a curse in the clerical service before we organized. A clerical job could always be found for the nephew, niece, cousin, or neighbor of a chief clerk or official, even if it meant getting rid of an old employee to make a place for him.²³

Superintendents and master mechanics in the early days practiced what amounted to a "spoils" system. In their frequent moves they took their favorite employees and gave them the choice jobs—at the displacement of other employees. Something of the frequency of the moves and commonness of the practice can be seen in biographies of railroad men. The following is an example:

Not long after leaving the East Mr. Minot and other friends who had gone with him urged me to join them. "It's too far," I answered, but the offer of a conductor's place at last induced me to accept. . . . [This in 1851].

After a stay of 4 months at Aurora, as I have already stated, I followed Mr. Johnson to his new field of labor. At first I was station agent at Waukegan, Illinois, and after about six weeks became conductor on the road. [This in 1855.]²⁴

On the subject of petty bribery, W. S. Carter, during certain arbitration proceedings, after inquiring rhetorically of a railroad official if he knew what conditions had driven the employees to demand seniority, "informed" him that division officials in early days "accepted" a steady stream of little tokens of esteem from admiring subordinates at Christmas time, birthdays, and on other occasions.²⁵ There is evidence that jobs were actually sold by petty railroad officials, but the extent to which this practice existed is in doubt. Mr. Carter in the proceedings just referred to recalled the court case in which De Joy, a section foreman near Chicago—but the owner of a villa in Italy—was fined for selling

²³ "What Are Seniority Rights Worth?" *op. cit.*, p. 7.

²⁴ Charles B. George, *Forty Years on the Rail* (Chicago: R. R. Donnelley & Sons, 1887), pp. 62, 78.

²⁵ *Arbitration Proceedings between Brotherhood of Locomotive Engineers and Brotherhood of Locomotive Firemen and Enginemen and the Western Railroads* (submitted to arbitration under Act of July 15, 1913, by agreement dated August 3, 1914) (Chicago: Law Reporting Co., 1914), IV, 3837.

jobs. And he quotes the special investigator in the case as saying that 90 per cent of the section foremen around Chicago enjoyed similar privileges.²⁶

The practice of discriminating against employees who received high wage rates is illustrated by the following description of the "Q" system then in general use.²⁷ This system, which supposedly was originated by the management of the Chicago Burlington and Quincy Railroad, was in reality a type of seniority or an extension of the apprenticeship principle. The system was a method of paying engineers on the basis of their length of service. The engineers claim not to have objected to the principle, but rather to its abuse. Under this system of gradual promotion it took nine years to "make" a first-class engineer. After an employee had been a satisfactory fireman for six years he was promoted to fourth-class engineer. Thereafter he was advanced one grade each year, provided that his record had been perfect during that year. The abuse was that not only was it difficult to get to be a first-class engineer, but also first-class engineers frequently were discharged for incompetence—and a few days later rehired as fourth-class engineers.

One of the purposes of unequal discipline for equal offenses—at any time or in any industry—is to change the apparent relative merit rating of the employees affected. Except in the rankest of cases, any official makes some attempt to convince the employees in general that in promotions and other instances of job allocation merit is the only consideration. No official wants to be known as unfair in his dealings with employees or as not having good judgment. And decisions on the basis of personal feelings toward an individual are unconsciously recognized by everyone as poor judgment. The unions maintain that the more the principle of seniority can be substituted for merit or as a measure of merit, the more difficult it becomes for an official's personal feelings to enter

²⁶ *Ibid.*, I, 544.

²⁷ John A. Hall, *The Great Strike on the Q* (Chicago: Elliot & Breezley, 1889), p. 37. See also C. H. Salmons, *The Burlington Strike* (Aurora, Ill.: Burnell & Ward, 1889), pp. 93-100; and Ripley's report, *op. cit.*, p. 306, in which he cites testimony from the *Eastern Engineers' Arbitration* (1912), p. 1013.

into the matter of selection of an employee for a promotion, lay-off, etc.

It should be observed that while errors may not be more inherent in railroad work than elsewhere—although some people would disagree, perhaps—errors in this industry can easily be of greater danger to life and property. And while in railroad work all errors may not be serious per se, nevertheless, in order to maintain work habits of a character which will prevent the occurrence of truly serious ones, all errors must be considered as serious. Also, since the geographical dispersion of railroad work makes a close supervision of all employees impossible at all times, every error cannot be detected; and, therefore, the discipline meted out for those errors which are detected must be severe enough not only to constitute adequate punishment to the errant employees but also to serve as an object lesson to other employees. Discipline in any industry may contain these elements, but where close supervision is impossible, such as in the case of the railroads, the object-lesson element must be given great consideration.

In an industry which has the problems of supervision and discipline just described, it is easy for an official to concentrate his attention, should he so desire, upon any given employee. In this manner the unfortunate employee can be "found" committing more errors than other employees. An employee having a record black with errors of omission and commission, even of relatively little consequence, is in a poor position to withstand the addition of a truly serious error. Even the union may feel hesitant in the face of such seemingly bad performance. This type of discriminatory discipline can be practiced so subtly, and the discipline can be administered with such apparently heavy heart, that the victim may be no more suspicious than to think that he has "run into a streak of hard luck." Even though he were convinced that he was being discriminated against, he would experience difficulty in convincing others to that effect.

The influence of army practices upon railroad operation.—When the railroads were young, they borrowed—borrowed heavily—from the sea and the military. In terminology, the words "trick" and "tour" are examples. But terminology was not all. Through-

out the history of this country business has attracted men in irregular numbers from all levels of the military. That the railroads took their share of such men is evidenced in part by the fact that even today the railroads have a semi-military system of command and discipline—much more so than does any other industry. And those who deemed the needs of the railroads analogous in matters of discipline and authority to those of the army, in all likelihood may have considered the army's seniority practice equally applicable. The similarity of the organization of the railroads to the army has been voiced many times, and at least as early as 1880. A good statement of the similarity is quoted:

This army of 450 thousand men is disciplined, but not as an army is disciplined, although on the most progressive railways the organization is not unlike that of a modern army; in fact, it must be much like that of an army of soldiers in order to be successful. . . . The general manager of a railway company corresponds very closely to the major general of an army; the general superintendents to the brigadier generals; the division superintendents to colonels; and so on down the list. . . . In fact, the deeper one goes into the comparison, the more resemblance does one find between a properly organized operating department and an army of soldiers, except in the manner of enforcing authority. So far as possible, promotion on railways is by seniority. The more thoroughly organized the railway, the more does this hold true.²⁸

Other contributing factors.—By the time of the World War the "boomer" or fly-by-night employee of the railroads had almost ceased to exist. There are living today telegraphers and switchmen who during their youth worked for twenty-five to forty railroads. As long as jobs were plentiful (and of course they were when men quit every few months) it was a common occurrence for a boomer employee simply to quit without notice—even to quit in the middle of his trick and walk off the job. Such employees as a class could hardly have been the most desirable. Doubtless railroad managements finally came to realize that, while seniority would entail a partial surrender of their prerogative of job allocation, the loss therefrom might be compensated by a decrease in the extremely high rate of labor turnover.²⁹ And, finally, it must

²⁸ G. H. Paine, "Railway Discipline," *Munsey's Magazine*, XXIII (1900), 398.

²⁹ "Treatment of Employees" (an editorial), *Railroad Gazette*, October 1, 1880, p. 518.

have occurred to union officials—if not in the beginning at least later—that a more settled class of employees would be more likely to become good dues-paying members.

THE EXTENT OF SENIORITY OBSERVANCE ON RAILROADS
AT THE BEGINNING OF FEDERAL CONTROL

Until it became evident that this country would become involved in the World War, the progress of the unions in obtaining the acceptance and widening the application of seniority may be said to have been effected under normal labor conditions.

The period of development under normal conditions.—It may be seen in Table 1 that the eighties were the most fruitful decade in railroad-union formation. It may be seen that every union was in existence a few years before it gathered sufficient strength on any road to be able to write an agreement with the management. The rate of progress in obtaining agreements was not the same for all unions; the Big Four³⁰ from the very start were the most successful. As one might infer, the biggest single factor determining a union's success in obtaining satisfactory seniority observance was its ability to secure agreements. The Big Four led the way not only in obtaining recognition of the seniority principle, but also in widening the application of that principle to additional phases of job allocation. This broadening of the application of seniority can be illustrated roughly by comparing the seniority portions of successive agreements of a typical railroad company with a given group of its employees. The Chicago Milwaukee St. Paul and Pacific was one of the early railroad companies to grant seniority to its engineers and is, therefore, a suitable example for the purpose because the development was spread over a longer period of time than would likely be the case in which a management formally recognized seniority at a comparatively late date.

³⁰ The Brotherhood of Locomotive Engineers, the Brotherhood of Locomotive Firemen and Enginemen, the Order of Railway Conductors, and the Brotherhood of Railroad Trainmen. Many firemen retain their membership in the firemen's organization after they are promoted to engineers; and, likewise, many brakemen retain their membership in the brakemen's organization after they are promoted to conductors. But the engineers' organization and the conductors' organization are made up only of engineers and conductors, respectively.

1880

When engines are laid up on account of slack of business or for repairs, the oldest men in the Company's employ will, as a rule, be kept at work, and the younger and unmarried men paid by the mile for what they can make as extra runners, the intention being to keep all engineers employed as far as practicable.³¹

1883

[No mention was made of seniority in the agreement of this date.]

1887

As a rule, when Engineers and Firemen are promoted to a higher grade in the service, the oldest men shall have preference of runs, on their respective divisions, when competent and worthy. Engineers of the highest grade shall also have preference of runs on their respective divisions. The Company reserves the right to deviate from this rule in special cases. Engines in both Freight and Passenger service to run first in and out, as far as practicable.

1891

ARTICLE XIV

PROMOTIONS AND TRANSFERS

1. Promotion of engineers will be made according to their age on the Division where they are employed, if they are competent and worthy. Divisions to be known as indicated by time cards in effect January 1, 1891, and shall include all branches of such Division.

2. Firemen's ages will rank from the date they enter the service in such capacity. This shall not effect [affect] the present standing of the men on any Division or run. Exceptions may be made to this rule in cases of men incapacitated for full service. Engines will run first in, first out, as far as practicable. The Company will not transfer enginemen from one Division to another, permanently, against the wishes of the men; but if a request is made by the men to be transferred, they shall rank as new men on the Division to which they are transferred. When enginemen voluntarily leave the service of the Company, and are subsequently re-employed, they shall rank as new men.

ARTICLE XVI

SURPLUS OF ENGINEERS AND FIREMEN

In the event of a surplus of Engineers or Firemen, the oldest men shall have the preference of employment—character, ability and merit being equal.

³¹ The word "oldest" does not refer to chronological age, but rather to length of service. The first line quoted from the 1891 agreement shows this meaning. Even today in railroad parlance the word "oldest" is used to designate the senior employee of whatever group of employees is then under discussion and not necessarily *the* senior man on the roster or railroad. The word "youngest" is similarly used.

As near as practicable the number of men in the service will be kept down to correspond with the volume of business, so that they make not less than 2,600 miles per month. When an engine is shopped for repairs, the engine-men will, when practicable, be assigned to another engine; when not practicable to do so, they shall have the preference as extra men.

1900

[The seniority portion of the 1900 schedule differs from that of 1891 in only two words.]

1902

ARTICLE XV

PROMOTIONS AND TRANSFERS

1. Promotions of enginemen will be made according to their age on the Divisions to which they belong, if they are competent and worthy.

2. Enginemen's ages will rank from the date they enter the service in such capacity. This shall not affect the present standing of the men on any Division or run. Exceptions may be made to this rule in cases of men incapacitated for full service.

3. Enginemen will run first in, first out, as far as practicable.

4. The Company will not transfer enginemen from one Division to another, permanently, against the wishes of the men; but if a request be made by the men to be transferred, they shall rank as new men on the Division to which they are transferred.

5. When enginemen voluntarily leave the service of the Company, and are subsequently re-employed, they shall rank as new men.

6. Enginemen may be transferred from one Division to another for a trip at the Company's convenience, but if on account of business or of other conditions a definite temporary transfer is made, the men so transferred will be allowed to make full time.

7. Engineers shall not be transferred to a Division where there are firemen eligible for promotion if the firemen are older in engine service than the engineer to be transferred.

ARTICLE XVII

SURPLUS OF ENGINEERS AND FIREMEN

1. In the event of a surplus of Engineers and Firemen, the oldest men shall have the preference of employment—character, ability and merit being equal. As near as practicable the number of men in the service will be kept down to correspond with the volume of business, so that they may make not less than 3,000 miles per month. When an engine is shopped for repairs, the enginemen will, when practicable, be assigned to another engine; when not practicable to do so, they shall have the preference as extra men.

2. In case there is a vacancy in assigned runs, either on account of a new run being put on, or a run becoming vacant, the same shall be bulletined and assigned to the oldest competent engineer desiring the same.

3. In case a man loses his run on account of discontinuance of the same, he shall be given the run to which his age entitles him.³²

The salient seniority provisions of the foregoing succession of agreements demonstrate the gradual increase in the application of seniority to additional phases of job allocation.

In 1880 the seniority rule applied only in times of layoff; that is, the men were to be laid off in the order of their juniority (the reverse order of their seniority).

In the schedule of 1887 it may be seen that this railroad at that time had various grades of engineers, and that within a given grade the oldest men should have preference of runs; but it was not specifically stated whether or not this would hold true during times of layoff.

In 1891 layoff seniority was again specifically included, and it was provided for the first time that promotions were to be made in accordance with seniority if the candidates were competent and worthy. Also, some general improvements were added: first, definite rules were laid down concerning the establishment, termination, and retention of seniority; and, second, a mileage limitation was inserted—that is, the number of men was to be maintained at such a figure that not less than 2,600 miles per month could be made by each man. It will be observed that this feature, in reality, limits the value of seniority to a man who is high on the list and benefits those low on the list. It is something of a departure from seniority, toward the principle of division of work.

The seniority portion of the agreement of 1900 was almost identical with that of 1891 and needs no further mention.

The agreement of 1902, however, added the principle of vacancy bulletining. Each of the seniority provisions was further refined, thus making the rules less likely of misinterpretation. This agreement may be said to have contained a full complement of seniority provisions with the exception of the “recall” principle, which, as has been explained, protects the laid-off employee’s sen-

³² From the files of the Chicago Milwaukee St. Paul and Pacific Railroad Co.

iority for a certain agreed-upon length of time during which he will be recalled, when and if needed, in the order of his seniority standing among the other laid-off employees of the same roster. The seniority provisions of later agreements show a gradual elaboration of application and of statement.

It is worth noting that, in general, the railroad-union development came first in the West.³³ The reason therefor was that the western roads were weaker than the eastern roads in various respects, which gave the unions a greater relative strength. In addition to being weak financially,³⁴ they were weak geographically in that they were located amid harsh and unattractive living conditions, which, together with the hardships and dangers incident to mountain and desert operation, forced the companies to grant higher wages and better working conditions in order to attract and retain employees.³⁵

By 1900 the Big Four unions had made much progress in solving their difficulties. They had obtained rather standardized wage rates and general principles in working conditions; though there was a great deal of variation in the details within their schedules—even within those of a given union.³⁶

Jones, writing in 1929, stated that by the turn of the century the brotherhoods had realized a goodly portion of their aims, including the acceptance of the principle of seniority.³⁷ This statement is true, but for purposes here some further comment is in order: There were railroads which had not yet granted seniority to any employee group, and there was no railroad which had granted seniority to all of its employees. The strong unions had obtained wide acceptance of seniority in its broader interpretation, but the less powerful unions had made only a little progress in either respect. The summation of the progress of the various unions at the turn of the century, however, made it apparent that

³³ Ripley, *op. cit.*, p. 270.

³⁴ *Ibid.*

³⁵ *Ibid.*, p. 272.

³⁶ Since the strong unions were those comprising the Big Four, and since most of the pioneering development of the seniority principle was due to their efforts, little reference is made to the other unions at this time.

³⁷ Jones, *op. cit.*, p. 415. See also *Report of the Industrial Commission*, XVII, 400.

seniority would be extended eventually to all crafts, on all railroads, and to every phase of job allocation to which it was applicable.

Soon after 1900 the Big Four brotherhoods apparently undertook to standardize their agreements in two respects: First, each union sought to standardize its agreements with the various railroads. Second, the Big Four unions sought to make the agreements of the various railroads with the brakemen, for example, closely comparable with those held by the other train- and engine-service unions. These efforts culminated not only in various arbitrations or "concerted" bargainings,³⁸ such as that of the conductors and brakemen jointly in 1907 with a group of the western railroads having an aggregate track mileage of around 110,000 miles,³⁹ but also in interunion agreements. The most famous of the latter were the "Cleveland Compact" between the brakemen and the conductors in 1919 and the "Chicago Agreement" between the firemen and engineers in 1913.

During these arbitrations the whole subject of working conditions, including seniority, was discussed in a detailed fashion. Judging from the fact that approximately 25 per cent of both the Cleveland Compact and the Chicago Agreement was devoted to seniority, this subject must have been one of the major topics of consideration at the meetings of each of these groups. The seniority portion of the latter instrument follows:

ARTICLE 10. *a*) Firemen shall rank on the firemen's roster from the date of their first service as firemen when called for such service, and when qualified shall be promoted to positions as engineers in accordance with the following rules:

b) Firemen shall be examined for promotion according to seniority on the firemen's roster; those passing the required examination shall be given certificates of qualification, and when promoted shall hold their same relative standing in the service to which assigned.

³⁸ These concerted bargainings were also for the purpose of meeting the objections of the railroads in regard to increasing wage rates. Whenever a union broached the subject of increased wage rates, the usual rejoinder of the management was that it was paying standard rates and that it would not be a "torchbearer" for higher wages.

³⁹ Bureau of Labor, Department of Commerce and Labor, *Bulletin No. 98* (Washington: Government Printing Office, 1912), pp. 44-45.

c) If for any reason the senior eligible firemen are not available and a junior qualified fireman is promoted and used in actual service out of his turn, whatever standing the junior fireman so used establishes shall go to the credit of the senior eligible fireman. As soon as the senior fireman is available he shall displace the junior fireman, who shall drop back into whatever place he would have held had the senior fireman been available and the junior fireman not used.

d) As soon as a fireman is promoted he will be notified in writing by the proper official of the company of the date of his promotion, and unless he file a written protest within 60 days against such date he cannot thereafter have it changed. When a date of promotion has been established in accordance with regulations such date shall be posted, and if not challenged in writing within 60 days after such posting no protest against such date shall afterwards be heard.

e) No fireman shall be deprived of his rights to examination nor to promotion in accordance with his relative standing on the firemen's roster because of any failure to take his examination by reason of the requirements of the company's service, by sickness, or by other proper leave of absence, provided: That upon his return he shall be immediately called and required to take examination and accept proper assignment.

f) The posting of notice of seniority rank as per section (d) shall be done within 10 days following date of promotion, and such notice shall be posted on every bulletin board of the seniority district on which the man holds rank.

g) Firemen having successfully passed the qualifying examination shall be eligible as engineers. Promotion and the establishment of a seniority date as engineer as provided herein, shall date from the first service as engineer, when called for such service.

NOTE.—On roads where promotion is to road service only, promotion and establishment of seniority date as road engineer will obtain.

h) The seniority date of a hired engineer shall be the date of his first service as engineer.

ART. II. a) When, from any cause, it becomes necessary to reduce the number of engineers on the engineers' working lists, those thus taken off, who have been promoted from the ranks of the firemen on any seniority district, may, if they so elect, displace any fireman their junior on that seniority district, under the following conditions:

First. That no reductions will be made so long as those in pooled or chain-gang freight service are averaging the equivalent of 3,000 miles per month; or, on the road extra list, are averaging the equivalent of 2,200 miles per month, or those on the extra list in switching service are averaging as much as 22 days per month.

Second. That when reductions are made they shall be in reverse order of seniority.

b) When hired engineers are laid off on account of reduction in service they will retain all seniority rights, provided they return to actual service within 30 days from the date their services are required.

c) Engineers taken off under this rule shall be returned to service as engineers, in the order of their seniority as engineers, and as soon as it can be shown that engineers in pooled or chain-gang freight service can earn the equivalent of 3,500 miles per month, or in extra service the equivalent of 2,600 miles per month.

d) Under this rule it is understood that after all engineers who have been taken off have been returned to service as engineers this rule shall not apply with respect to further additions.

ART. 13. a) Where jurisdiction over hostlers is transferred to the Brotherhood of Locomotive Firemen and Enginemen, and where jurisdiction over men running switch engines is transferred to the Brotherhood of Locomotive Engineers, the rights that have been acquired and practices now in effect for the men under the jurisdiction of the organization from which jurisdiction is transferred shall be preserved by the organization to which jurisdiction is transferred.

b) It being further understood that "fixtures" in yard service shall not be displaced by road engineers during periods of business depression.⁴⁰

As the resolution clause of the Chicago Agreement testifies, the aim of the parties to the interunion agreements was that the clauses therein were to be included in the railroad agreements of the respective parties:

It shall be the policy of both organizations, acting through their general committees on each railroad, to open negotiations with the proper officials of such railroad for the purpose of securing their cooperation in placing in effect the rates of wages and rules of employment agreed to herein. . . .

A depiction of the results of the application of seniority to more phases of job allocation and also the effects of intra- and interunion standardization upon the agreements of the Big Four may be seen by noting on the following chart the absolute and comparative growth in the seniority portion in a typical series of agreements.

Curve A in Figure 1 traces the increase in the number of pages of the successive agreements of the engineers with the Chicago Milwaukee St. Paul and Pacific Railroad Company. Curve B

⁴⁰ Ripley, *op. cit.*, pp. 309-11.

shows the growth of the seniority portion of the same series. Curve *C* shows the percentage of *B* to *A*.

Curves *A* and *B* reflect a gradual growth until about 1907, a very rapid increase from then until about 1920, and practically no growth after that date. The rapid growth in the size of the agree-

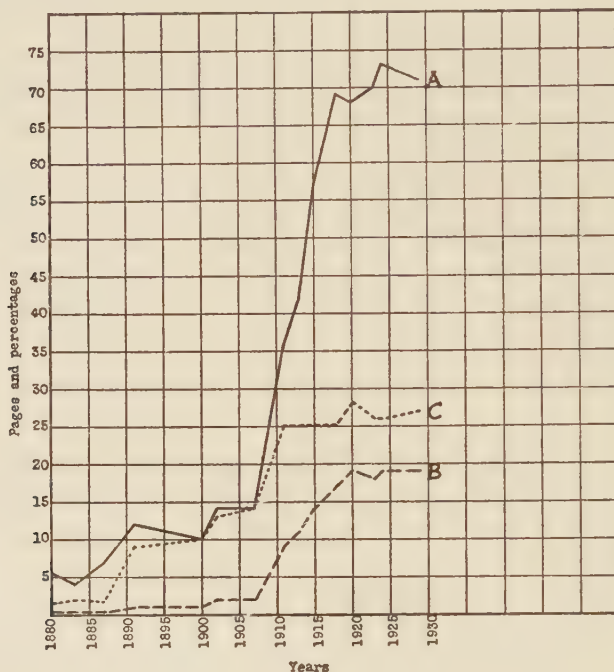


FIG. 1.—The absolute and comparative increase in the size of the agreements and seniority portions thereof between the C. M. St. P. & P. Railroad Co. and its engineers. *A*—the total number of pages in each agreement; *B*—the aggregate of space (in pages) pertaining to seniority in each agreement (see pages 27-29 for discussion and illustrations of the criteria which were used for determining which rules and portions of rules should be counted as pertaining to seniority); *C*—the percentage of space pertaining to seniority in each agreement (that is, the percentage of *B* of *A*).

ment and the seniority portion thereof reflects the result of the efforts to standardize the agreements in regard to both the clauses to be included and the wordings of those clauses. Naturally, the standardization was toward a composite agreement consisting of

the most favorable clauses and of the most favorable wordings of them. Therefore, almost any agreement would be lengthened both by the inclusion of new clauses and by the increased meticulousness of their statement.

The interstitial, underlying character of the seniority principle may be brought out by describing the criteria which were used in this study for determining whether or not a rule or portion of a rule should be classed as belonging to the seniority portion of an agreement. Quite often there is no specific seniority rule in an agreement. To a large extent seniority is incorporated into many rules as the method or procedure which must be followed in executing those rules. For example, in Rule 31 (of the agreement now in effect), entitled "Promotion of Engineers," paragraph (a) states: "Promotion of engineers will be made according to their seniority in the service and ability when found competent and worthy. . . ."

While this rule under most circumstances would be classified as dealing with promotion, for the purpose here it unquestionably should be considered as a seniority rule. The space occupied by rules which clearly deal with seniority aggregates ten pages.

The opposite category consists of rules which clearly are not seniority rules. For example, in Rule 34, entitled "Care of Engines," paragraph (f) states: "If an engineer is required to take care of an engine at an irregular layover station, he shall be paid for such service at regular rate of pay."

It is true that an engineer holds his particular position by reason of his seniority standing, but to consider such a clause as a seniority clause for that reason only would be tantamount to declaring that all rules are seniority rules. Therefore it is quite obvious that the mere fact that seniority alters the meaning of a rule is not in itself sufficient criterion for classifying it as dealing with seniority.

Between these extreme examples there are many rules which are more difficult of classification. Rules aggregating an additional nine pages of space have been classed as belonging to the seniority count. A few illustrations will demonstrate the criterion of

differentiation. Rule 28, entitled "Pooling of Engines," reads as follows:

Reasonable consideration will be given to the pooling of engines on request of engineers and if the conditions warrant doing so, request will be granted. In that case, engineers will run first in first out, regardless of engines. This does not effect [affect] regularly assigned runs.

The basis of procedure laid down in this rule is the "first in, first out" practice. It might be argued that since individuals who are in a pool, or any first-in-first-out group, are treated as though they had been hired at the same time, seniority should be considered as having disappeared, or as being too remote to be of importance; and, therefore, such a rule should not be classified as a seniority rule.

There are two reasons for considering the pool service as based upon the seniority principle. In the first place, an employee obtains by seniority bid the right to work in this service. In the second place, "taking turns" is one of the fundamental concepts of the seniority principle. Seniority is defined in the dictionary as the state of being senior or prior by birth, office, service, or rank. Entry into pool service causes an employee's priority basis to change from one of date-of-entry into the employer's service to one of order-of-entry into the terminal. The first crew in the pool service to enter a terminal has the right to be the first crew to leave that terminal for a return trip. The principle is the same as it is in an individual's working-life cycle: those who are born first, other things being equal, will be the first to be employed, the first to get into the pool service, the first to get a regular job, the first to get one of the most preferred jobs, and, finally, the first to retire.

A class of rule opposite from the first type is exemplified by Rule 23, entitled "Calling of Engineers," paragraph (c) of which reads as follows:

Engineers in freight service assigned to regular runs, and their rest period at the terminal prevents the train from leaving on schedule time, the train will be held one (1) hour, or more if consistent, to permit the engineer to go out on the run.

Here the word "regular" is the key word. It is true that an engineer obtains both regular and extra jobs on the basis of his seniority, but a nonseniority industry also has both regular and extra employees with respective duties and privileges. This rule, therefore, is not classed as a seniority rule.

In summary, the general criterion is: If a given rule *in the absence of seniority* would still have meaning, then it is *not* classed as a seniority rule—albeit that the presence of seniority alters that meaning. What, for convenience, may be classed as an exception can be explained by reference to Rule 25, entitled "Pro Rata Mileage," paragraph (g) of which reads: "The H & D seniority district will be considered as extending from Aberdeen to Minneapolis, and from Cologne to Hastings, via Farmington." If a rule is for some purpose such as the designation of a home terminal from which overtime is to be computed, the rule is not classed as a seniority rule. But, in the case at hand, the rule is for no purpose other than to establish a "seniority district"; therefore, it must be counted as dealing with seniority.

The acceleration in seniority acceptance which occurred after it became evident that this country would enter the World War.—Since the next section will deal with the influence which the federal government had upon the general acceptance of seniority by American railroads, it is necessary to mark the point which the unions had reached at the beginning of this influence, and also to note the increase in the rate of seniority acceptance which was occasioned by the entry of this country into the war.

The influence of the federal government upon the extension of seniority as well as upon the spread of unionism in general in the railroad industry neither began nor ended with the period of its control of the railroads. Theoretically, this influence began with its first efforts to aid in the settlement of railroad labor disputes. Practically speaking, however, it began when, in view of the increasing threat of the involvement of the United States in the war, the government gave heed to labor's wishes in order that the latter's co-operation might be assured when and if this country did enter the conflict.

The first evidence that such an attitude was developing within

the government was the radical manner in which the Big Four won the eight-hour day.⁴¹ While the latter received a favorable decision from the Supreme Court, the language of the decision contained unpleasant connotations. However, the other railroad unions interpreted the government's "co-operation" as indicative of a sympathetic attitude toward labor's aspirations. At any rate, many of the unions immediately became more forward-moving in their efforts to gain concessions.

During the following year, 1917, the number of strikes which occurred was greater than in any previous year—and has been surpassed only twice since.⁴² This situation was due in part to the fact that the cost of living was increasing more rapidly than wage rates. On the one hand, the war industries were already getting war profits and were, therefore, offering increased wages in order to obtain additional employees. Railroad employees were answering this call because, although the railroad business was at boom level, the cost of railroad materials had risen faster than freight rates, and consequently the managements had not raised wage rates. The resulting increase in the rate of labor turnover in railroad shop-craft services became alarming to managements and unions alike.

In spite of the fact that it was becoming increasingly apparent that this country would become involved in war, the labor unions, realizing their own needs and those of their members, recognizing that the victory by the Big Four had engendered an attitude of anxious liberalism in Congress and the President, and feeling, also, that patriotism had not caused the managements to be born again, viewed the situation as a compelling opportunity to bring wages and working conditions to a higher and more uniform level.

The extent to which the unions had succeeded in writing seniority into their agreements was by this time almost parallel with their success in obtaining written agreements; therefore, the de-

⁴¹ Adamson Act, 39 Statutes at Large 721; passed Sept. 3, 1916, to go into effect Jan. 1, 1917. Declared constitutional in *Wilson v. New*, 243 U.S. 332-89, on March 19, 1917.

⁴² Dale Yoder, *Labor Economics and Labor Problems* (New York: McGraw-Hill, 1939), p. 79.

gree to which the various unions had obtained seniority may be determined by noting the extent to which they had obtained agreements. The following is a summary of that attainment:

By 1917, according to Wolf, 80 per cent of the engineers, conductors, brakemen, and firemen belonged to their respective unions, and these unions held agreements on about 70 per cent of the railroad mileage of the country.⁴³ Walker D. Hines, who succeeded William G. McAdoo as director-general of railroads, in a more liberal estimate stated that "practically all" of the railroad mileage of the country was covered by train- and engine-service agreements.⁴⁴ And, as has been shown, those agreements had been brought to a very high degree of standardization in their seniority as well as other provisions. In fact, the seniority arrangements of the Big Four were little affected by the government either during or after the war, for the reason that, practically, these unions had arrived. The remainder of this article, therefore, largely concerns the progress of the other unions.

During the year 1917—that is, between the time that it became evident that this country would declare war and the time when the government took control of the railroads—some of the unions made their first major strides. Others did not. Among the latter group were the signalmen and the maintenance-of-way employees. The signalmen had obtained their first agreement and seniority recognition in 1907⁴⁵ and had added thereto only a few agreements by 1917; they made no rapid gains during 1917. The maintenance-of-way employees had organized and obtained their first agreement and seniority recognition quite early and had acquired by April, 1917, some strength of membership, but they had not been able to write seniority into all of their agreements.⁴⁶ In short, they made no particular progress until after the inauguration of federal control.

⁴³ Harry D. Wolf, "The Railroad Labor Board" (unpublished Ph.D. dissertation, Department of Economics, University of Chicago, 1926), p. 69. (In 1927 this work was published by the University of Chicago Press, but in abridged form.)

⁴⁴ Walker D. Hines, *War History of American Railroads* (New Haven: Yale University Press, 1928), p. 152.

⁴⁵ See Table 1, p. 9, *supra*.

⁴⁶ See p. 8, *supra*.

The clerks, like all clerks, had been notoriously slow to identify themselves as laborers and had made little progress by 1917. They had only six agreements at the time of the entrance of this country into the war,⁴⁷ but, realizing their opportunity, they added thirteen by the time the government took over the railroads.⁴⁸ "Illustrative of their movement for further recognition was the strike of the clerks in the fall of 1917 on the Atlantic Coast Line . . . when President Wilson had intervened. . . ."⁴⁹

The operators or telegraphers, who probably were the most important of the miscellaneous unions, as late as 1911 had only twenty-one system schedules.⁵⁰ Their growth thereafter, however, was quite rapid. In June, 1917, President Perham reported that fourteen new and one hundred and thirteen revisions of schedules had been effected during the preceding two years.⁵¹ In fact, the order was intensely active during 1917 in its bargaining and polling of strike votes, although only one strike actually ensued.⁵² By the time of the institution of federal control of the railroads the operators had agreements covering about 75 per cent of the railroad mileage of the country.⁵³

In addition to the unions thus far considered there were six other unions: the sheet-metal workers, boilermakers, machinists, blacksmiths, electricians, and carmen—together referred to usually as the shop-craft unions. These unions had made considerable progress before this country entered the war. By attacking where they were strong relative to the managements, they had obtained almost complete recognition in the Northwest and Southwest. This group of unions easily was second in power among the various groups of railroad unions. They were stimulated to even greater activity by the passage of the eight-hour-day law in the fall of 1916 and by the realization of their strategic position—for it had become very apparent that those who kept rolling stock ready for service were not only peculiarly indispensable in rail-

⁴⁷ National Industrial Conference Board, Research Report No. 46, *Railroad Wages and Working Conditions* (New York: Century Co., 1922), p. 23.

⁴⁸ *Ibid.*

⁵¹ *Ibid.*, p. 28.

⁴⁹ Hines, *op. cit.*, p. 153.

⁵² *Ibid.*, p. 29.

⁵⁰ McIsaac, *op. cit.*, p. 27.

⁵³ Hines, *op. cit.*

road work,⁵⁴ but also that they were in great demand by other industries.

Late in 1916, in view of these circumstances, the shop-craft unions presented the southeastern roads with extensive demands for union recognition and improvements in wages, hours, and working conditions. Under threat of a strike the controversy was referred to the Secretary of Labor, and, as a result of his decision, the roads recognized the unions and signed agreements with them.⁵⁵ Thus, in spite of the fact that they were not over 30 per cent organized, one or more of them held agreements on 70 per cent of the railroads at the beginning of federal control.⁵⁶ Flushed with this victory, they determined to announce on January 1, 1918, demands for standardized agreements with every railroad in the country.⁵⁷ Federal control was instituted just two days before the date set for the strike vote. While there were other reasons which were at least equal in importance to the labor problem, the government undoubtedly feared that the demands of the shop-craft unions would result in a nation-wide strike and, therefore, it took over the railroads sooner than it would have otherwise.⁵⁸

[*To be continued*]

⁵⁴ *Ibid.*, p. 19.

⁵⁵ *Ibid.*, p. 153.

⁵⁶ *Ibid.*

⁵⁷ *Ibid.*

⁵⁸ *Ibid.*, p. 18.

DAN H. MATER

THE DEVELOPMENT AND OPERATION OF THE RAILROAD SENIORITY SYSTEM

DAN H. MATER*

THE RAPID EXTENSION OF SENIORITY ON RAILROADS DURING THE ERA OF FEDERAL CONTROL

The wartime period of government operation of the railroads.—The fact that the government took over the control of the railroads partially because of threatening labor relations was tantamount to an acceptance of the responsibility for the adjudication of those labor controversies. Other employees besides those in the shop crafts also had needs and desires; consequently, the uppermost question in every union official's mind was what would be the government's attitude toward labor. It was generally recognized that this attitude, regardless of its character, would be of great and lasting force. Labor stood to lose or to profit not only during the period of federal control but afterward as well—it would be natural for whatever working conditions the government adopted to leave their mark long after the cessation of its control. The following are the courses of action which the government might have adopted:

1. Discontinued the existing collective agreements for the duration of the war and used instead a type of military command and discipline
2. Recognized existing agreements but frozen them at that point during the period of federal control
3. Recognized and bargained with the unions for an entirely new but standardized national agreement
4. Recognized all existing relationships and bargained from time to time for any changes which might be desired by either party

These alternatives are listed in the order of their favorableness to the employees.

That the government's policy toward the whole railroad ques-

* Research fellow in the School of Business, University of Chicago. Footnote references in this instalment continue the numbering of the first instalment, *Journal of Business of the University of Chicago*, XIII, No. 4 (October, 1940), 387-419.

tion, including the labor portion of it, was largely opportunistic is evidenced somewhat by the fact that the railroads were not taken over until it became apparent that private management was unable to meet the situation. It appears that the government expected to meet the labor phase of the situation, first, by operating the railroads by orders of quasi-military character and, second, by placing some ranking labor leaders in executive positions in the Railroad Administration in order to instil a spirit of partnership into the ranks of the employees. For example, W. S. Carter, who for years had been president of the firemen's organization, was placed at the head of the Division of Labor. Such a plan might well have appeared to promise a minimum of labor unrest without excessive cost. As time passed, however, the government was forced to supplement this strategy with more practical appeals. It soon became apparent that substantial wage increases were absolutely essential to satisfactory relations with, and justice toward, labor. Following the general increases, however, every effort was made to pacify the demands for further wage increases by granting relatively inexpensive concessions to the unions which the latter especially esteemed. Probably no working condition, except union recognition and the correlative right of collective bargaining, proved more efficacious for this purpose than did the extension of the principle of seniority.⁵⁹

When General Order No. 1 appeared, naturally, it was scanned by management and union officials alike for any intimation of the government's attitude toward labor. This order, issued December 29, 1917, read in part as follows:

All officers, agents, and employees of such transportation systems may continue in the performance of their present regular duties, reporting to the same officers as heretofore and on the same terms of employment.⁶⁰

The phrase "same terms of employment" was too general, of course, to be of particular assurance to anyone.

⁵⁹ Wolf, *op. cit.*, p. 69.

⁶⁰ U.S. Railroad Administration, Director-General of Railroads, *Public Acts: Proclamations by the President Relating to the United States Railroad Administration and General Orders and Circulars Issued by the Director General of Railroads* (Bull. 4 [revised to December 31, 1918]), p. 145.

The first evidence of the government's recognition of the unions as the representatives of the employees is believed to have been a letter from the director-general to the head of the shop crafts, A. O. Wharton, in February, 1918.⁶¹ Item 5 of this letter dealt with seniority and read as follows:

Where a reduction is made in the force of mechanics, promoted helpers in accordance with their seniority shall be set back first; then advanced apprentices; no mechanics to be laid off until all such promoted helpers and apprentices have been set back.⁶²

Since all railroads did not have seniority arrangements with the shop crafts, this step, theoretically, was a step toward standardization of the method of layoff by seniority. However, in view of the fact that other industries were offering higher wage rates for mechanics, the railroads were experiencing difficulty in keeping enough employees in these departments. Therefore, the seniority layoff provision was of little moment.

General Order No. 8 of February, 1918, contained three paragraphs which it was thought probably included the germ of whatever labor policy the government would eventually adopt:

3. . . . Matters of controversy arising under interpretations of existing wage agreements and other matters not relating to wages and hours will take their usual course, and in the event of inability to reach a settlement will be referred to the Director General.
4. . . . The impression seems to exist on some railroads that the said order [General Order No. 1] was intended to prevent any change in the terms of employment during governmental operation. The purpose of the order was to confirm all terms of employment existing upon that date, but subject to subsequent modifications deemed advisable for the requirements of the service. Any contrary impression or construction is erroneous. Officers and employees will be governed by the construction here given.
5. No discrimination will be made in the employment, retention, or conditions of employment of employees because of membership or nonmembership in labor organizations.⁶³ . . .

It was the stated purpose of the order to correct wrong impressions which seemed to have gained some headway. In the first of these paragraphs the director-general was made a final and extra

⁶¹ Hines, *op. cit.*, p. 155.

⁶² *Ibid.*, pp. 303-4.

⁶³ U.S. Railroad Administration, Director-General of Railroads, *op. cit.*, p. 168.

source of appeal for the settlement of grievances. In other words, the methods of settling disputes as outlined in the existing agreements between carriers and their employees was to be continued without any change except for the addition mentioned.

The second paragraph was an out-and-out confirmation of all existing agreements and an assurance that the Railroad Administration would bargain with the unions for any change which either party might later desire. Thus, of the possible policies which the government might choose, the most favorable seemed likely of adoption.⁶⁴

The third paragraph was perhaps the prime reason for the whole order.⁶⁵ Following the institution of federal control, the membership of the unions had dropped alarmingly; the unions alleged that the decline was the result of propaganda to the effect that while the government was in charge of the railroads it would take good care of the employees but that it would not brook union activity. To what extent such propaganda occurred or was responsible for falling union membership is not known, but at any rate the union heads did appeal to the director-general to make a statement which—in their words—would protect the employees against discrimination.⁶⁶

General Order No. 13 of March, 1918, expanded the three above-mentioned paragraphs of General Order No. 8 into a memorandum of understanding between the director-general and the presidents of the Big Four⁶⁷ and set up Adjustment Board No. 1 to adjudicate controversies. The director-general remained the only authority above this and subsequent boards.⁶⁸

By this action all reasonable uncertainty was removed as to

⁶⁴ See p. 34, *supra*.

⁶⁵ Henig, *op. cit.*, p. 39.

⁶⁶ *Ibid.*

⁶⁷ U.S. Railroad Administration, Director-General of Railroads, *op. cit.*, pp. 178-81.

⁶⁸ General Order No. 29 of May, 1918, set up, through a memorandum of understanding, Adjustment Board No. 2 to deal with the controversies of the shop-craft employees, parallel in its functions to Adjustment Board No. 1 (*ibid.*, pp. 300-304). General Order No. 53 of November 13, 1918, set up, through a memorandum of understanding, the third and last adjustment board to deal with the controversies of those employees who were not covered by Adjustment Boards Nos. 1 and 2, namely, operators, clerks, switchmen, and maintenance-of-way employees (*ibid.*, pp. 340-43.)

whether or not the government would recognize the existing collective-bargaining agreements and the right of the unions to represent their members. It still was not absolutely clear to what extent the government would prove amenable to bargaining with the unions for agreements where none existed and for changes in existing agreements.

Supplements Nos. 7 and 8 to General Order No. 27 of September 1, 1918, were the first of a series of arrangements between the director-general and the employees by crafts; these arrangements had all the attributes of regular agreements or schedules except that they were in the form of orders. Supplement No. 7 established the wages, hours, and working conditions for all railroad clerks. That part of it dealing with seniority comprised approximately 20 per cent of the total agreement and is reproduced here:

ARTICLE XII.—PROMOTION AND SENIORITY

(a) Promotions shall be based on ability, merit, and seniority, ability and merit being sufficient, seniority shall prevail, except, however, that this provision shall not apply to the personal office forces of such officers as superintendent, train master, division engineer, master mechanic, general freight or passenger agent, or their superiors in rank and executive officers. The management shall be the judge, subject to an appeal, as provided in Article XIII.

(b) Seniority will be restricted to each classified department of the general and other offices and of each superintendent's or master mechanic's division.

(c) Seniority rights of employees referred to herein, to: (1) New Positions, (2) Vacancies will be governed by paragraphs (a) and (b) of this article.

(d) Employees declining promotion shall not lose their seniority.

(e) Employees accepting promotion will be allowed thirty (30) days in which to qualify, and failing, will be returned to former position without loss of seniority.

(f) New positions or vacancies will be promptly bulletined for a period of five (5) days in the departments where they occur. Employees desiring such positions will file their applications with the designated official within that time, and an appointment will be made within ten (10) days thereafter. Such position or vacancy may be filled temporarily pending an assignment. The name of the appointee will immediately thereafter be posted where the position or vacancy was bulletined.

(g) In reducing forces, seniority shall govern. When forces are increased, employees will be returned to the service and positions formerly occupied, in the order of their seniority. Employees desiring to avail themselves of this

rule must file their names and addresses with the proper official. Employees failing to report for duty or give satisfactory reason for not doing so within seven (7) days from date of notification will be considered out of the service.

(*h*) A seniority roster of all employees in each classified department, who have been in the service six (6) months or more, showing name, date of entering the service, and the date of each promotion or change, will be posted in a place accessible to those affected.

(*i*) The roster will be revised and posted in January of each year, and shall be open to correction for a period of sixty (60) days from date of posting, on presentation of proof of error by an employee or his representative. The duly accredited representative of the employee shall be furnished with a copy of roster upon written request.⁶⁹

The clerks at that time were organized only in a very scattered fashion; tens of thousands of them prior to this supplement worked without benefit of seniority, and many thousands of others worked under inferior seniority provisions. Consequently this supplement greatly extended the seniority coverage.

Supplement No. 8 to General Order No. 27 established for the maintenance-of-way employees seniority provisions identical to those provided for the clerks by Supplement No. 7.⁷⁰ This group of employees also greatly profited by the seniority extension, since in this service also there were relatively few agreements and, therefore, inadequate seniority protection.

Just before the Armistice was signed General Order No. 51 was issued. It read:

The majority of railroads under Federal Control have already made announcement with respect to the preservation of seniority rights for employees who have entered the military service of the Army and Navy, and have indicated that so far as practicable, preference in reemployment or reinstatement would be given to soldiers and sailors when mustered out of the service.

(1) In order that as nearly as practicable there shall be a uniform treatment of this matter, the following general principles will govern: (*a*) In the case of an employee having established seniority rights, so far as practicable, and where the employee is physically qualified, he will be restored to such seniority rights. (*b*) In the case of employees who do not have seniority rights under existing practices, a consistent effort will be made to provide employment for them when mustered out of military service.

(2) Upon railroads where the assurances given on this subject have been more specific than the provisions of paragraph (1) hereof, such assurances shall be observed.⁷¹

⁶⁹ *Ibid.*, pp. 244-45.

⁷⁰ *Ibid.*, pp. 253-54.

⁷¹ *Ibid.*, pp. 335-36.

Two purposes were served by this order. First, it prevented the added sacrifice—the loss of seniority—which entrance into the military forces would have meant to a railroad employee. Second, in providing that those employees who held seniority might return to their former positions, the problem of readjusting the soldiers and sailors to civil life was partially solved, albeit, a like number of employees presumably were displaced by their return.

The peacetime period of government operation of the railroads.—Neither in the director-general's report for 1918 nor elsewhere was any indication given as to what change the end of hostilities would bring in the Railroad Administration's policy toward labor. In fact, until August, 1919, the Railroad Administration continued to function much as it had before: circulars, memorandums of understandings, national agreements, and general orders, together with addenda, interpretations and supplements to the general orders continued to be issued just as though the Armistice had not occurred. Working conditions for other groups of railroad employees were provided by additional supplements to General Order No. 27.⁷² Those supplements which dealt with seniority and other working conditions (excluding wage rates) are contained in Table 2.

The seniority provisions in most of the supplements listed in Table 2 were similar to those reproduced from Supplement No. 7.⁷³ Supplement No. 13, superseding Supplements Nos. 10 and 11, did not specifically provide seniority for the agents and operators. It must be noted, however, that each of the sets of working conditions contained in various supplements to General Order No. 27 provided that all clauses in any previously existing agreements which did not conflict with those in the supplements were not to be affected by the supplements. Therefore, in spite of the fact that Supplements Nos. 10, 11, and 13 did not contain seniority provisions, the operators continued under their previously existing seniority provisions. It will be recalled that the operators had agreements covering about 75 per cent of the country's railroad

⁷² It will be recalled that Supplements No. 7 and 8 were issued before the Armistice.

⁷³ See pp. 37 and 38, *supra*.

mileage. Somewhat later, seniority was prescribed by Supplement No. 21 for the operators not covered by union agreements.

Seniority was specifically provided for the police-service employees by Supplement No. 14; the sleeping and parlor car con-

TABLE 2*

EMPLOYEE GROUPS FOR WHOM WORKING CONDITIONS WERE ESTABLISHED
BY THE RAILROAD ADMINISTRATION BY MEANS OF SUPPLEMENTS
TO GENERAL ORDER NO. 27

Supplement	Employee Group	Issued	Effective
No. 7...	All clerks except those attached to private staff of management officials	9-1-1918	9-1-1918
No. 8...	Maintenance-of-way and bridge and building employees	9-1-1918	9-1-1918
No. 10...	Telegraphers, telephoners (except switchboard), agent telegraphers, and agent telephoners (superseded by Supplement No. 13)	11-16-1918	10-1-1918
No. 11...	Nontelegraph agents (superseded by Supplement No. 13)	11-23-1918	10-1-1918
No. 12...	Passenger brakemen (this supplement, in addition to defining their duties, provided that this order should not infringe upon the seniority rights of white trainmen)	12-2-1918	6-1-1918
No. 13...	Telegraphers, telephoners (except switchboard), agent telegraphers, agent telephoners (superseded Supplements Nos. 10 and 11)	12-28-1918	10-1-1918
No. 14...	Police-service employees	1-25-1919	1-1-1919
No. 17...	Sleeping- and parlor-car conductors	4-14-1919	1-1-1919
No. 18...	Dining-car, buffet, café, and club-car employees	4-14-1919	1-1-1919
No. 19...	Express employees	4-14-1919	1-1-1919
No. 21...	Telegraphers, telephoners (except switchboard), agent telegraphers, and agent telephoners where agreements between managements and the union had not been made	5-7-1919	5-1-1919
No. 26...	Train porters	1-12-1920	11-1-1919

* Source: Bull. No. 4 (revised) of *Public Acts: Proclamations by the President Relating to the United States Railroad Administration and General Orders and Circulars Issued by the Director General of Railroads to December 31, 1918*; Bull. No. 4 (revised) of *Public Acts: Proclamations by the President Relating to the United States Railroad Administration and General Orders and Circulars issued by the Director General of Railroads after January 1, 1919* (not continuously paginated).

ductors by Supplement No. 17; the dining-car, buffet, café, and club-car employees by Supplement No. 18; and the express employees by Supplement No. 19. Nothing was said about seniority for the train porters in Supplement No. 26. And Supplements Nos. 15 and 16 established only rate changes which were to be in-

cluded in existing agreements (all of which already contained seniority) of the train and engine services, respectively.

Until August, 1919, it had remained the policy of the Railroad Administration to operate the railroads by means of orders and to refrain from making formal agreements or schedules with the employees,⁷⁴ but the increasing pressure for further concessions—particularly for increases in wages—could be denied no longer.⁷⁵ This was especially true with the shop-craft employees.⁷⁶ In fact, many unauthorized strikes had occurred, of which the most serious was the one in which some 200,000 shop-craft employees participated in August, 1919.⁷⁷

Inasmuch as the war was over and presumably the roads would be returned to their owners at a not too distant date, the Railroad Administration wished to avoid further concessions, the burden of which would be shifted to the owners. It also hoped that the cost of living would recede and thus lessen the clamor for further wage increases. Since no such happy event took place, it became evident that something would have to be done to appease the employees. The employees, especially those who never before had been privileged to work under seniority and other union working conditions, were attaching great importance to schedules.⁷⁸ The Railroad Administration, therefore, took the view that, inasmuch as the most costly features of any probable agreements had been established already by Supplement No. 4 to General Order No. 27, perhaps the cheapest method of satisfying labor would be to fashion the wages, hours, and working conditions contained in the supplements to General Order No. 27 into formal agreements.⁷⁹ The principal changes would be some further readjustments which

⁷⁴ John W. Walber, *Some Aspects of the Railroad Labor Problem* (an address given before the Traffic Club of New York at the Waldorf-Astoria Hotel, New York City, May 26, 1922, and published in pamphlet form), p. 8.

⁷⁵ Hines, *op. cit.*, p. 172.

⁷⁶ Walber, *op. cit.*, p. 9.

⁷⁷ Hines, *op. cit.*, p. 173.

⁷⁸ *Annual Report of W. G. McAdoo, Director General of Railroads, 1918* (Washington: Government Printing Office, 1919), p. 9. Examination of this pamphlet reveals that it is a special press release of only the chapter of the *Report* which dealt with the labor results of federalized railroads.

⁷⁹ Hines, *op. cit.*, p. 175.

seemed necessary anyway from the standpoint of equalization.⁸⁰ Accordingly national agreements were consummated with the following employee groups:

Group	Date of Agreement
Shop-craft employees	September 20, 1919
Shop laborers and maintenance-of-way employees	December 16, 1919
Clerks	January 1, 1920
Firemen (stationary) and oilers	January 16, 1920
Signalmen	February 1, 1920

The Transportation Act⁸¹ was hurried through to completion two days before the date upon which the railroads were to be returned to their owners—February 28, 1920. At that time an agreement with the telegraphers was pending.⁸²

These national agreements naturally superseded any existing conflicting agreement clauses; but, just as had been provided earlier in the supplements to General Order No. 27, it was specifically stated that any agreement or portion thereof which was more favorable than the superseding national agreement was to remain in force. All of the national agreements except the one with the firemen (stationary) and oilers—who never had had seniority—contained a full complement of seniority provisions.⁸³

When it was finally determined that the railroads were to be returned to their owners, a controversy arose as to whether or not the national agreements and other rules and working conditions which had been established by the government should be foisted upon private management. Naturally the railroad officials strenuously opposed the idea of accepting *in toto* a set of employee working conditions for which they had not bargained, especially since many of the agreements differed markedly from those in effect at the time the carriers relinquished control of their properties. However, the managements would not have been so anxious to see the agreements withdrawn had they not believed that they could obtain from their employee groups working contracts which would be more favorable than those which had been granted under

⁸⁰ *Ibid.*, p. 172.

⁸¹ 41 U.S. Statutes at Large 456.

⁸² Walber, *op. cit.*, p. 9.

⁸³ National Industrial Conference Board, *op. cit.*, pp. 40-41.

the government control period. The unions, since they shared this belief, were doubly anxious not to yield the agreements which they had acquired during federal control.

Seventeen months after the termination of the war, the railroad properties were returned to their owners,⁸⁴ and machinery was provided for the settlement of railroad labor disputes.⁸⁵

A résumé of the progress made during the period of federal control.—That the working conditions in general of railroad employees had improved very much during the period of federal control is undeniable, but it is also true that some of that improvement would have taken place even though the war and federal control had not occurred. In regard to the increase in seniority practice in particular, the progress was one of acceleration of a trend which was definitely noticeable before the war.⁸⁶ The causes of this acceleration were: first, the need for labor had greatly increased and, second, the government had been friendly to labor because, for one reason, the winning of the war could be facilitated greatly by preventing dissatisfaction in labor's ranks, particularly in the munitions and transportation industries. The extent to which the improvement in employee working conditions during the period of federal control consisted of an increased recognition of seniority may be judged from the comments of various authorities.

Wolf in his exhaustive study of the Railroad Labor Board stated that "the most outstanding change was the extension of the seniority principle to almost all railroad employees below the management level."⁸⁷

Director-General McAdoo commented on the request of the employees for standard rules as follows:

Where classes, through negotiations, had secured wage agreements, including rules, the demand was not so persistent, but for the great number of employees who had never been privileged to work under fixed regulations of employment the demand was urgent, with the result that in Supplements to

⁸⁴ President Wilson issued his proclamation of retransfer of the railroads to their owners on December 24, 1919, to become effective March 1, 1920.

⁸⁵ 41 U.S. Statutes at Large 456.

⁸⁶ National Industrial Conference Board, *op. cit.*, p. 23.

⁸⁷ *Op. cit.*, p. 69.

General Order No. 27 rules have been established providing for the administration of discipline and the maintenance of the seniority principle for more than a million employees.⁸⁸

Pauline Goldmark, in charge of the Women's Service Section during the period of federal control of the railroads, reported:

There is no doubt that the new seniority rules opened up the door of advancement to a much larger group of women than had previously had these opportunities, and that women in general have eagerly taken advantage of these new openings. The conditions under which they are working are more auspicious in regard to the cardinal points of ages and advancement than have been previously offered them in any other field.⁸⁹

Henig has declared:

That real concessions were gained during the War is evident when we compare the working rules of 1918, 1919, and 1920 with those prior to federal control. We list the rule as it was prior to 1918 and indicate the gain of the later period. . . .

B. "Any railway clerk not wishing to accept a promotion . . . will lose his right to seniority."

Supplement No. 7 permitted an employee to retain his seniority rights if he declined a promotion.

C. ". . . advancement [shall depend] on fitness and ability."

Supplement No. 7 included in its rules for the promotion of employees a clause providing for the exercise of seniority rights.⁹⁰

It should be recalled, in regard to the above quotation, that the clerks had agreements with very few railroads prior to the war.

The author offers the following observation as evidence of the increasing favorableness of employees' working conditions: Prior to the war the seniority clause with respect to promotions usually read: "When ability is equal, seniority will prevail." In the supplements to General Order No. 27, just reviewed, the phrase used was "ability and merit being *sufficient* seniority shall prevail."⁹¹

⁸⁸ *Annual Report of W. G. McAdoo* . . . , 1918.

⁸⁹ *Annual Report of W. D. Hines, Director General of Railroads, for 1919* (Washington: Government Printing Office, 1920), p. 80.

⁹⁰ *Op. cit.*, pp. 48-49. Henig cites a 1917 agreement with the Texas and Pacific Railroad as his source for Rule B and an agreement of 1917 with the New York, New Haven and Hartford Railroad as his source for Rule C. Brackets and ellipses are Henig's.

⁹¹ Italics mine.

Most of the national agreements used the latter phrase also; however, the shop-craft agreements used a slightly different phrase, "if sufficient ability is shown by trial." That there is considerable difference in the meanings of these wordings is readily apparent. In fact, the evolution from a state of affairs in which the employer gave little more than lip service to seniority, to one in which his control over job allocation is little more than the right to complain, is nowhere more eloquently portrayed than in the three foregoing phrases.

THE RETURN TO RAILROAD COLLECTIVE BARGAINING AND
THE EFFECT UPON THE STATUS OF SENIORITY

Clearly, Congress and the President intended that employee working conditions on the railroads should return to normal as rapidly as possible; that is, that the working conditions (including wages) should again become the result of bargaining between labor and its employers, and that, through the machinery set up by the act, the government's position should revert to that of an intermediary for the purpose of settling disputes between the parties. It was also intended that the working conditions which had been established during the period of federal control should continue in effect until the parties agreed on the subject of working conditions. But in the event that the parties were unable to arrive at mutually satisfactory agreements, it was provided that the Railroad Labor Board would intervene.

The temporary continuation of the national agreements by order of the United States Railroad Labor Board.—The United States Railroad Administration for some time previous to the retransfer of the roads had refused demands for further wage increases in order to avoid saddling the carriers with such obligations upon the eve of the return of their properties. As a consequence, by the time of the retransfer, the accumulation of dissatisfaction over the wage question, together with the addition of the problem of labor working agreements, made the situation a truly serious one. The employees were seeking not only to retain the national agreements but also to obtain further wage increases; the managements were in violent opposition to both of those desires. It is to be under-

stood, of course, that the term "national agreements" is intended here to include all employee working conditions which were in operation at the conclusion of the federal control era; the fact is, some of these working conditions had not been redrafted in the form of national agreements at the time of the retransfer of the roads.

Under such conditions it is not surprising that as soon as the new Board was established, the whole controversy was dumped into its lap—a dispute which involved practically every railroad and every union and the whole subject of wages, hours, and working conditions. Neither is it surprising that the Railway Labor Board, in the face of such a colossal task, promptly postponed consideration of the working conditions and told the parties to continue to operate under the existing working conditions until such time as it could give attention to that phase of the dispute.⁹²

At length the Board took up the question of working conditions. For several months the opposing sides presented testimony pro and con as to the advisability of continuing the national agreements. Much of the difference of opinion centered around certain rules. The claims and counterclaims concerning seniority can be presented more advantageously in later sections of the study dealing with evaluation.

The decision, when finally forthcoming, ordered that the rules and working conditions of the national agreements and other orders be continued until July 1, 1921⁹³—a date sixteen months after the retransfer of the roads and thirty-three months after the war ended. In the meantime the parties were to keep the Board informed of their progress in setting up boards of adjustment in order that the Board might be in a better position to promulgate working rules in the event that the parties themselves proved unable to do so.

Both sides were fairly well pleased. The managements were pleased because the national agreements were abrogated; the

⁹² Decision No. 2, July 20, 1920, *Decisions of the United States Railroad Labor Board* (Washington: Government Printing Office, 1921), I, 18.

⁹³ Decision No. 119, April 14, 1921, *Decisions of the United States Railroad Labor Board* (Washington: Government Printing Office, 1922), II, 87-96.

unions were pleased because the sixteen principles which the Board had included in its decision as a guide to the parties in arriving at agreements contained most of the major principles which the unions desired. That the Board's recommendations were highly satisfactory to the unions in so far as seniority was affected may be seen by comparing them with the twelve principles which the six shop crafts, firemen and oilers, clerks, maintenance-of-way employees, and signalmen telegraphed to President Harding as their idea of what should be included in a fair agreement. No. 11 of the Board's list of principles was as follows: "The principle of seniority long applied to the railroad service is sound and should be adhered to. It should be so applied as not to cause undue impairment of the service."⁹⁴ Principle No. 11 of the unions' list was the same: "Craft Seniority to be recognized."⁹⁵

Efforts of the unions to regain the losses occasioned by the abrogation of the national agreements.—It should be understood that the abrogation of the national agreements and other working conditions which had been established during that time had no effect whatsoever upon working conditions which had previously existed, provided they were more liberal to those contained in government orders or agreements.⁹⁶ This principle was reiterated time and again. An example of the wording may be seen in Rule 2 of the Clerks' National Agreement:

The rules of this agreement shall supersede and be substituted for all rules of existing agreements, practices, and working conditions in conflict therewith; provided that rules of existing agreements dealing with conditions of employment not specifically provided for herein shall remain in effect and be recognized as addenda to this agreement by the several railroads which negotiated such rules.⁹⁷

Although the abrogation of the national agreements did not cause all employee groups to lose their war-gained extension of seniority and other improvements in working conditions, there did follow some reversion to pre-war working conditions. The groups

⁹⁴ *Ibid.*, p. 96.

⁹⁵ Henig, *op. cit.*, p. 134.

⁹⁶ Interpretation No. 4, July 25, 1921, to Decision No. 119, *Decisions of the United States Railroad Labor Board*, II, 610.

⁹⁷ Quoted in Decision No. 1270, October 23, 1922, *Decisions of the United States Railroad Labor Board* (Washington: Government Printing Office, 1922), III, 804.

which suffered most heavily, naturally, were those which had gained the most during the period of federal control. The principal groups in this category were the six shop crafts, the signalmen, the clerks, and the maintenance-of-way employees. The very recency of the gains of these groups made their working conditions extremely irksome to the managements; in other words, these unions had had insufficient time in which to consolidate their gains, and, therefore, they were less able to withstand the deflationary pressure of the managements. But the lowly, once having experienced a parity with their stronger brethren, would not long remain deposed.

Following the abrogation there was a general effort by the unions to bring the agreements back to the level of favorableness which had been established during the period of federal control. The method for so doing was to bring before the Board disputes which involved the contents of agreements. The results are contained in Table 3.

From Table 3 it may be seen that seniority was either provided, remanded, or recommended. As a matter of fact, the seniority question was remanded whenever it seemed fairly certain that the parties could agree upon its inclusion. However, the task of establishing agreements was not completed during the life of Section III of the Transportation Act of 1920; "neither employers, employees, nor the general public were satisfied with that attempt to settle a labor dispute by the direct decision of the Government."⁹⁸ The Railway Labor Act of 1926 as amended in 1934 placed the emphasis back upon mediation and conference as the prime methods of railway labor dispute settlement. To implement the settlement of disputes by conference "on the spot," it was made obligatory that the parties should make every effort to make and maintain agreements and file them with the National Mediation Board. The process of agreement-making, therefore, has continued.

Something of the final phase in the long struggle of railroad unions to obtain seniority may be seen by reviewing the unions'

⁹⁸ *First Annual Report of the National Mediation Board* (Washington: Government Printing Office, 1935), p. 64.

progress of recent years in obtaining collective-bargaining agreements. Information is not available from which to determine ex-

TABLE 3
DISPUTES BEFORE THE RAILROAD LABOR BOARD CONCERNING THE
INCLUSION OF SENIORITY IN COLLECTIVE-
BARGAINING AGREEMENTS

Employee Group	No. of Carriers Involved	No. of Decision and Addendum	Date of Decision	Ruling of the Board in Regard to Seniority	Source*
Six shop crafts†	90	{ 222, Ad. 3 222, Ad. 6	10/8/21 11/29/21	Provided‡ Provided	II, 567 II, 571
Maintenance of way	{ 77 19 80	501 501, Ad. 1 1,450	12/19/21 12/23/21 12/11/22	Recommended § Recommended Provided	II, 469 II, 598 III, 1029
Clerks	72	630	1/23/22	Provided	III, 100
Signalmen	48	707	2/13/22	Provided	III, 390
Dispatchers	{ 81 33	721 1,830	2/18/22 6/21/23	Remanded|| Provided	III, 121 IV, 390
Express	1 (Amer. Ry. Express)	722	2/16/22	Remanded	III, 126
Firemen and oilers	1 (Seaboard Air Line)	3,892	10/23/25	Provided¶	VI, 1229
Telegraphers	{ 71 20 1 (Pennsylvania)	757 2,374 3,003	3/3/22 4/14/24 2/20/25	Remanded Provided Provided	III, 156 V, 344 VI, 310
Yardmasters	12	1,266	10/13/22	Remanded	III, 765
Dining-car conductors	1 (Rock Island)	2,888	2/3/25	Provided	VI, 160
Sleeping-car conductors	1 (Pullman Co.)	2,052	12/4/23	Provided	IV, 782

* *Decisions of the United States Railroad Labor Board* (volume and page numbers).

† Electricians, carmen, boilermakers, sheet-metal workers, machinists, blacksmiths.

‡ The Board decided that Rules 18 and 31, which were seniority rules during the federal control era, should be written into the agreements.

§ The Board said that it omitted the seniority rules merely because the majority of the parties had agreed upon them; it recommended that the others also include them.

|| The meaning here is essentially the same as in the above footnote. "Because a very large majority of the carriers and their employees have agreed upon seniority and discipline rules, those subjects are remanded in their entirety."

¶ This group of employees did not have seniority before or during the war. In a dispute concerning the working conditions which should be included in the working agreements of these employees with thirty-one carriers, seniority was neither mentioned nor implied. It is interesting to note, however, that in the above decision these employees won the right to be laid off in the reverse order of seniority. The secretary to Vice-president Wright of the organization claimed in conversation with the author that all their railroad agreements now contain seniority, although Mr. Wright, in a letter to the author, stated that their records do not show when they first obtained seniority.

actly the proportion of railroad employees who work under union working conditions. However, a fair approximation can be made.

The 148 Class I railway carriers of this country together have agreements with 2,666 groups of employees.⁹⁹ There are 364 groups with which they do not have agreements.¹⁰⁰ On the basis of these figures 88 per cent of the employee *groups* are organized. But an analysis of the 364 unorganized groups leads one to believe that the average number of employees in these unorganized groups is a very great deal less than the average number of employees in the organized groups. This may be seen from the fact that the groups which most often are not organized (not including railroads having no employees in those services) are groups which definitely are not populous. This is further supported by the fact that on many railroads, employees in these same groups are not used. For example, on 71 Class I railroads the yardmasters are not organized; on 21 others no yardmasters are employed.¹⁰¹ Three other slightly populated crafts or classes of employees are found in the marine service of the railroads. To a lesser extent this is true of other classes of employees, such as the signalmen, dispatchers, stewards, and cooks and waiters. From the foregoing evidence it seems logical to believe that employees on Class I carriers, who employ 90 per cent of the railroad employees of the country,¹⁰² are within 1 or 2 per cent of complete organization.

Classes II and III and miscellaneous carriers, who together employ 10 per cent of the railroad employees of the country, have 1,395 agreements.¹⁰³ Assuming that on these carriers also the less populous groups have been slower in obtaining agreements, it seems logical that the agreements of these carriers cover at least half of their employees, or 5 per cent of the total number of railroad employees of the country.

It may be seen from the foregoing discussion that probably not less than a total of 94 or 95 per cent of the railroad employees of the country work under union agreements, which, so far as has been determined, include seniority. But the foregoing calculation

⁹⁹ *Fifth Annual Report of the National Mediation Board*, p. 26, Table 12.

¹⁰⁰ *Ibid.*, p. 27, Table 13.

¹⁰¹ *Ibid.*

¹⁰² *Second Annual Report of the National Mediation Board* (Washington: Government Printing Office, 1936), p. 27.

¹⁰³ *Fifth Annual Report of the National Mediation Board*, p. 26, Table 12.

does not include nonunion seniority recognition. In fact, seniority is so ingrained in the railroad way of doing things that it can be safely stated that practically all railroad employees—union and nonunion—below the management level are on a seniority basis. It goes even farther than that. Conversation with many railroad officials and observation of promotion practices indicate that seniority is a major factor of consideration in most promotions at the official level.

SENIORITY RULES AS THEY EXIST TODAY IN THE RAILROAD INDUSTRY

Having traced the development of the railroad seniority system, it seems appropriate to describe in considerable detail the system as it exists and operates in the railroad industry today. In the collective-bargaining agreements of the railroads the seniority rules are formidable in their detail of statement, interpretation, and application. While the general principles are quite standardized, there exists a great deal of variation in the details. Naturally, the following description will adhere as closely as possible to the typical and with mention of the chief variations only.

General remarks concerning the rules which define the dimensions of the seniority right.—As has been already stated, the seniority principle is observed in promotions, layoffs or reductions of forces, recalling of those previously laid off, and the filling of vacancies. These seniority privileges or opportunities will be given individual consideration. But, first, more needs to be said concerning the rules which govern the establishment and cancellation of the seniority date.

Seniority cannot be transferred between persons. It lacks this fundamental legal attribute of property. There is only one exception to this general rule. Occasionally, usually under some extenuating circumstance, "trading" is countenanced. For example, two telegraphers on the same road, but in different seniority districts, may be allowed to exchange positions and seniorities. However, each member of the trade forfeits some of his seniority—usually one-third of it.

From the foregoing illustration it may be seen that seniority is limited geographically also. Definite seniority districts are de-

fined. The geographical limits never extend beyond the confines of the firm and usually over only a portion of it. The limits vary from branch to branch of the railroad service. The train-service employees, engine-service employees, telegraphers, some of the maintenance-of-way employees, and some of the employees in the clerical service have seniority districts which are coterminous with the superintendent's division—which on a small road might be the entire railroad. A few miscellaneous classes of employees have as their seniority district a grand division or general superintendent's division. Nearly all the employees in the shop-craft services and some of the clerks have point or office seniority, respectively. The meaning is the same; that is, an employee has seniority rights over the positions in the terminal, office, or shop.

An employee's seniority right is limited also to one kind of work. Obviously a clerk, for example, is carried only on the clerks' roster. In rare instances an exception will occur. For example, a clerk having so little seniority as to be without work might get an opportunity to begin as brakeman in the train service with the same company.¹⁰⁴ Thus he would establish a seniority date as a brakeman. But in a comparatively short time he would happen to be needed in both services at the same time. In whichever service he failed to respond for duty he would be dropped from the roster. There are also dual seniority arrangements. For example, every engineer holds seniority as fireman as well as engineer. But this situation will be dealt with later.

What might be called a third dimension of the limits of the seniority date is time—the length of time which an employee may retain his seniority date without working. Formerly most agreements or schedules provided that an employee who had not been used within a ninety-day period was to be dropped from the roster or list—sickness excepted, of course.¹⁰⁵ Junior employees naturally are the ones who are affected by such a clause; the more severe

¹⁰⁴ An employee is removed from the employee rolls and, therefore, his seniority roster as soon as it is learned that he has been hired by another company.

¹⁰⁵ Cases have occurred in which an employee maintained for years and years that he was too sick to work, but who, upon "recovery," passed the physical and other examinations and took his choice of the positions within his seniority rating, just as though he had obtained it in the usual manner and had been continuously at work in the seniority district.

the layoff, the higher on the list an employee would need to be to escape the "ax." During the depression which began in 1929, many employees lost their seniority in this way—many of the senior ones among them lost half a lifetime's seniority. Since then the time limit in this clause has been either greatly extended or eliminated. It should be understood, however, that in all railroad agreements an individual's seniority accumulates exactly with the passage of time until he is dropped from the roster. For example, an employee with ten years' seniority who takes three months leave of absence will, at the end of that time, have ten and one-fourth years of seniority.

The seniority opportunity afforded by vacancies.—A permanent vacancy occurs when an employee dies, is discharged, resigns, or transfers to another department, and also when a position is added. A temporary vacancy is created when an employee takes a leave of absence for any bona fide reason, becomes ill, or another accepted emergency occurs.

A vacancy which promises to last longer than a few days is advertised or bulletined. All short vacancies, therefore, are filled by extra men; also, all long vacancies which arise suddenly are filled by extra men until the results of the bids thereon are known.

Under the seniority system an employee is not hired to take a regular job; instead he is hired for part-time work, also termed extra or relief work. Extra men are used in the order of their seniority. However, an extra employee is not compelled to do work for which he is unsuited even though he is the senior, idle, extra man. For example, a yard clerk would not be called upon to relieve a cashier or a ticket clerk; or an operator would not be called upon to relieve an agent-telegrapher.

From time to time either employee attrition or improvement in business conditions will require the industry to add new names to the employee rolls. When an employee is dropped from the list, the seniority rank of all those who previously were junior to him is thereby improved and, by the same token, their right of preference improves to the same degree. If new positions are created by the company, the seniority rank of no one is changed; but the value of every individual's seniority is increased because there are

more jobs to choose from and, therefore, the amount of seniority necessary to get a regular job is decreased.

It is important to note that the whole system of bidding is a privilege, not a necessity. An individual is guided in his bidding by his desires and also his fears. He is not likely to bid in a job which he knows he cannot fill. In fact, the company will refuse to allow an individual to obtain by his bid a position which clearly he cannot "handle." In questionable cases the union stands in the middle and seeks to prevent an individual from being too optimistic in his claims of ability and, on the other hand, seeks also to prevent the company from being too pessimistic about a man's ability. The general rule which is included in every agreement is that an employee shall have thirty days in which to make good on any position. Should he prove incapable within that time he must be allowed to return to his former position without seniority prejudice—this does not protect him against discipline for errors made during that time, however.

The desires and fears of employees differ, of course, but in general a regular job is preferable to an extra job, and among the regular jobs there are those which are commonly agreed to be more desirable than others. The first job which an employee is able to obtain by bid is likely to be a long temporary vacancy. Sometimes, however, a long temporary vacancy is a very desirable one, and an employee then holding a regular job will "bid it in." Upon its expiration he will return automatically to his regular position. As one moves up the seniority ladder, he is able to command regular jobs, first the less desirable ones, later the more desirable positions, and at length he will be at the top of the list and can command any vacancy.

At the present time the men who hold top or No. 1 rank on seniority rosters are near or even past permissible retirement age. In consequence such an individual's choice of jobs is quite likely to be a day job of short hours and light physical effort. On the other hand, an employee who is somewhat below the top of the list, and who, therefore, is more likely still to have great physical vigor, might in the train or engine service, for example, choose to take a job which has great overtime possibilities, such as a work train.

In the train and engine services *only* is there an intermediate step between the extra and permanent jobs. Permanent jobs in the engine and train services on the road are those on "regular" or scheduled trains. Nearly all passenger trains and probably half of the freight trains run on a daily, twice-weekly, or thrice-weekly schedule. To man the unscheduled trains, which usually are freight trains, there is a group of crews called a "pool." It is also known as the "chain-gang," "belt," "first-in first-out," "rounds," and perhaps by other names. An employee in a pool is said to be regularly assigned to the irregular service.

Agreements provide that a pool shall be maintained at a size which will allow the members thereof to make the mileage per month agreed upon. (To a lesser extent the size of extra boards is also regulated by agreement.) If business improves, the pool is increased by advertising a pool vacancy. Ordinarily the oldest extra board crew would get it; if it were in the train service, the oldest conductor and oldest brakeman on the respective extra boards would get it. If business declines, the youngest pool crew is placed back on the extra board.

Just as the names of this service indicate, the individuals in a pool take turns—regardless of their differences in seniority. The order of departure from any terminal is determined by the order of arrival. If for any reason they are not run out of a terminal in the order of their arrival (i.e., someone loses a turn), that crew *may* get payment for a "runaround." The rules which describe the conditions surrounding a runaround for which payment will be made are quite complicated and occasion many disputes.

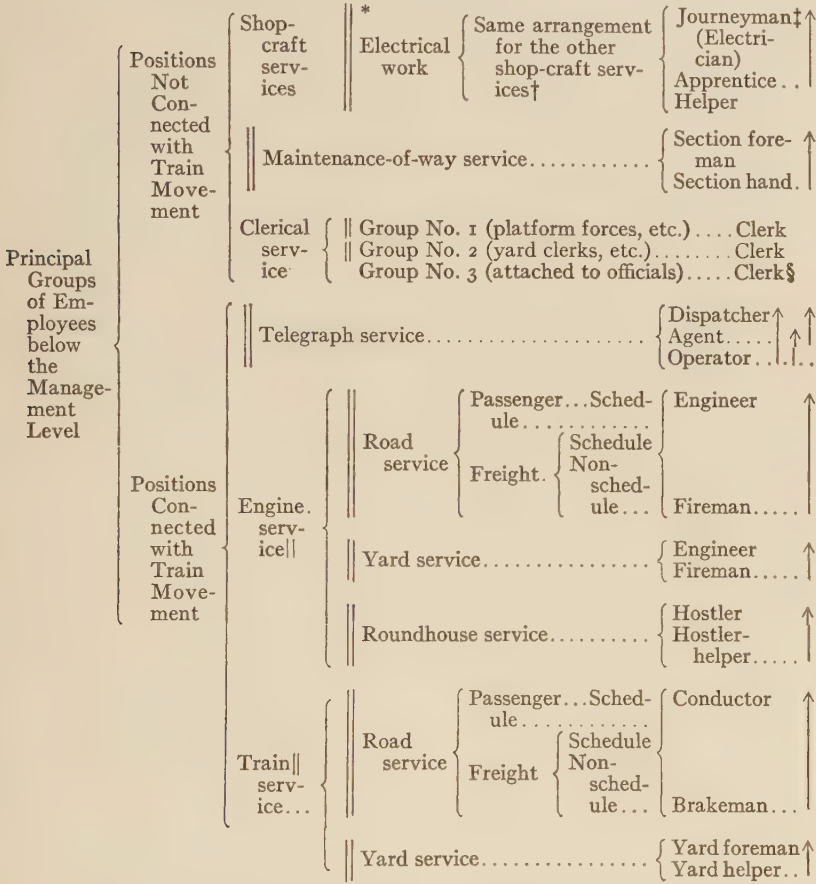
The seniority opportunity afforded by promotion.—There are several kinds of promotion, and the seniority consequences are not the same for all types.¹⁰⁶

If a clerk learns telegraphy and is promoted to the status of

¹⁰⁶ Chart I, on p. 59, shows promotion routes below the management level which are usually followed and which do not involve the loss of seniority in the inferior service. There are probably twenty other services which have not been alluded to either in the preceding discussion or in the chart—for example, the dining-car and sleeping-car services. However, since the number of employees involved are small and since they utilize no seniority provisions which differ from those already described, little would be gained by their inclusion.

CHART I

THE SCOPE OF WORK OVER WHICH THE SENIORITY RIGHTS OF EACH OF THE PRINCIPAL GROUPS OF RAILROAD EMPLOYEES EXTENDS



* The seniority rights of any given employee extend to the double vertical lines only.

† The other shop-craft services are sheet-metal workers, boilermakers, carmen, blacksmiths, and machinists.

‡ Where an established promotion path exists, it is indicated by an arrow.

§ This group has no seniority.

|| This service is charted as having separate rosters for each subdivision.

telegrapher, the general rule is that he must forfeit his clerical seniority and must begin seniority accumulation all over again on the new roster.¹⁰⁷ In other words, any promotion that is not a recognized route is considered merely a transfer although in railroad parlance the individual would be said to have been promoted.

If an employee below the management level is promoted to a position in the management, he does not lose his seniority thereby; it continues to accumulate. And he may at any time return to his former position with full seniority privileges, provided he passes the physical and book-of-rules examinations. This same privilege is extended to an employee who is selected by his union for full-time salaried work for the brotherhood.

A great many branches of the railroad industry have apprenticeship arrangements. In the shop crafts, for example, the transition from apprentice to journeyman is a promotion route which does not entail the loss of seniority in the inferior level of the work. On the other hand, a journeyman's helper is not in the line of promotion toward a journeyman. There are also some miscellaneous categories of subjourneyman level, such as special apprentice and helper-apprentice or apprentice-helper, the promotion provisions for which are unstandardized.

The train and engine services utilize, in spite of the complications, the principle of the apprentice-journeyman arrangement. A railroad company will hire journeymen in these services, that is, engineers and conductors; or it can "make" them by promoting apprentices, that is firemen and brakemen, respectively—although the term "apprentice" itself is infrequently used. The company is not entirely free to choose between hiring a conductor or promoting a brakeman; it is bound by its agreement with the union to observe a certain ratio between hirings and promotions. This proportion is on a sliding scale; that is, it differs according to the amount of time which the company demands as the appren-

¹⁰⁷ There have been a few cases in which an extra employee has been on two rosters simultaneously for a short time. Eventually in such cases the employee will be busy in one capacity when called upon for service in the other and must, therefore, sacrifice his seniority in one or the other of the services.

ticeship period. For example, the standard arrangement in the engine-service agreements provides that if a company requires a fireman to fire between three and less than four years, at least one fireman must be promoted to every engineer hired from the outside; four and less than five years' firing apprenticeship, two firemen must be promoted for each outside engineer; and so on until after eight years' firing apprenticeship all firemen must be promoted.

Promotion in the train and engine services does not mean, however, that the employee immediately will start to work in the superior service. In fact, it may be years later before he does. This lag is caused by the fact that the length of the apprenticeship period produces engineers faster than the need for additional engineers occurs. In railroad vernacular, "they don't die off fast enough." Under this arrangement, naturally, the senior unpromoted employee is the first to be promoted. And naturally, also, the oldest promoted man who has not yet been used in the superior service is the first to be so used. A promoted man's seniority in the superior service does not begin until his actual use in that service. But he does *not* lose his seniority in the inferior service when he begins working in the superior service; it continues to accumulate. For example, a fireman who has twenty years of firing experience when he starts to run an engine will, in another ten years, have thirty years' seniority as a fireman and ten years' seniority as an engineer. On the other hand, an employee who was hired *as an engineer* will have after ten years not only ten years' seniority as an engineer but *also* ten years' seniority as a fireman.¹⁰⁸ Considerable importance must be attached to this dual seniority, as the following discussion will bring out.

Under the assumption that an employee will exercise his seniority whenever a better job becomes vacant, he will gradually progress, in the firing service, for example, from extra jobs to pool service, then to regular freight runs, and probably next he will fire on a passenger run. Of course, many exceptions to this order of progression occur. In the meantime he will have been technically

¹⁰⁸ It will be understood that the brakeman-conductor situation closely parallels the fireman-engineer arrangement.

promoted after the first three to eight years, and, ordinarily, some years after promotion he will begin actual service as an engineer. His first years of running an engine will be another period of "bucking the extra board." Roughly, his progress on the engineer's ladder will parallel his former progress on the left side of the cab.

It is evident that promotion from brakeman to conductor, or fireman to engineer, often may mean another period of "starvation wages," irregular hours, and frequent absence from home while climbing the new ladder. Some men, in view of these conditions, if the agreement allows the "fixture" arrangement, choose not to take promotion. This privilege is now uncommon. However, a man who has become unfit for train movement because of injury, old age, or incompetence is quite often allowed to become a fixture in the yard or roundhouse branch of his service. When this arrangement is permitted, a fixture cannot afterward exercise his seniority except in case he is "bumped" (displaced) by another fixture or his own job is abolished. In either instance he may bump or displace a junior fixture.

The train and engine services have been spoken of thus far as though they occurred only on the road, that is, on the main line between terminals. There are, however, both train and engine positions in terminal yards; also the hostler and hostler-helper jobs in the roundhouse are available to engineers and firemen. Formerly both were open to firemen only. There is a difference of opinion as to whether or not the present tendency is toward placing these branches in separate rosters. Where all branches of the engine service are on the same roster, an engineer in road service accumulates seniority in the yard and roundhouse branches of the engine service also; but, of course, an engineer does not accumulate seniority rights in the road-engine service until he has been technically promoted to and been used in that district as a road engineer. Thus, starting as a hostler-helper one might through successive opportunities accrue: forty years seniority as a hostler-helper, thirty-five years as a hostler, thirty years as yard fireman, twenty-five years as yard engineer, twenty years as road fireman, and fifteen years as road engineer—all within forty years of serv-

ice with the same company on the same division. Of course, such a progression as outlined would never occur. A more likely type of circumstance concerning changes in the level of the engine service would be one in which there happened to be a shortage of road firemen and a surplus of yard firemen and, therefore, some young yard fireman was permitted to change.

Thus far the discussion of promotion opportunities has been in regard to the train and engine services. The procedure in other services varies somewhat from the foregoing description.

In the clerical service the positions differ widely in the range of ability and training required. There are three major classes of clerks. One group is made up of those clerks who are attached to executive staffs. The managements refuse to allow clerks to obtain these positions by seniority; they claim that the duties attached to these positions concern confidential matters and therefore, that they, the managements, should have the right to select whom they want. The agreements stipulate what positions are on this "excepted" list.

The remaining clerks are divided into two mutually exclusive seniority groups in order to make the jobs within each more homogenous. Even so there is considerable variation in kind and quality of skills existing within each group. Since there is no apprenticeship arrangement in the clerical service, there is no established promotion route, and consequently dual seniority does not exist in this service. Instead, if a yard clerk, for example, wants to be a cashier, he takes steps to learn the duties of a cashier; then he bids on a cashier vacancy.

In the telegraph service there are three groups of employees, all of whom are required to have telegraphic skill: dispatchers, agents, and telegraphers or operators. The normal promotion route for a telegrapher is either toward the position of station agent or toward the position of dispatcher. And an agent also may become a dispatcher. But there is no compulsion that either an agent or a telegrapher prepare himself for a higher position. In the event a telegrapher becomes an agent, he does not, as a result, lose his seniority as a telegrapher. In fact, most agents are agent-telegraphers, that is, they are agents with telegraph duties.

Agents and operators are on the same roster; however, a few of the more important agent positions are starred; that is, they are appointive positions and, therefore, are not obtained by seniority.

The operator who is promoted to dispatcher can exercise his seniority only on dispatcher positions, unless he chooses to return to his former status as a telegrapher or agent-telegrapher. However, if he is hired as a dispatcher, he can exercise his seniority only over dispatching vacancies. This means that a hired dispatcher does not accumulate telegraph seniority. In fact, since the position of dispatcher is usually considered as an official position, a dispatcher who might wish to accumulate seniority both as a telegrapher and as a dispatcher could do so only by hiring himself out as a telegrapher and then obtaining a promotion to dispatcher.

The seniority opportunity afforded by the displacement privilege.—In the shop-craft services, or wherever a *true* apprenticeship arrangement exists, apprentices are laid off in the order of their juniority, and hence no displacement or bumping is necessary. A journeyman whose job has been abolished may displace a junior journeyman if there is one working; if no junior journeyman is working, he may then bump a helper in the same craft, provided the helper is his junior. And that helper may then bump a junior helper. However, since helpers are not in line of promotion, that is, they are hired for that job only, a helper frequently has more seniority than some of the journeymen and, therefore, is safe from displacement by those journeymen. An apprentice under the formal apprenticeship contract cannot be displaced either by a journeyman or by another apprentice.

In the train and engine services the situation is a little different. Whereas in the above illustration apprentices are promoted to journeymen but cannot be bumped by them, in the train and engine services, engineers and conductors bump firemen and brakemen, respectively—under certain conditions.

For example, an engineer whose job has been abolished may bump any junior engineer unless he himself is the youngest engineer. Then the displaced junior engineer in turn bumps a still younger engineer. At length by this process the *youngest* engineer

is bumped off the extra board. Then, but not before, a displaced engineer may bump a fireman; or a conductor a brakeman. And the bumping process continues until the youngest extra fireman, or brakeman, must "take to the woods." If the reduction of forces continues, all firemen and all brakemen will be displaced by engineers and conductors, respectively. Every engine will be manned by two engineers—one acting as fireman. Practically the utter limit was reached during the last depression when engineers and conductors who had held regular runs for years found themselves without jobs even as extra firemen or brakemen.

In the telegraph service the displacement privilege is also somewhat complicated. The usual arrangement is that a regularly assigned telegrapher whose job has been abolished is allowed to bump either the *youngest* regularly assigned man or *any* extra man; an extra telegrapher can bump any junior extra telegrapher. It will be recalled that a displaced engineer may displace any junior engineer. The reason for the difference is that telegraphers live and work in one place, whereas engine and train service employees can change jobs a great deal without moving their homes. Thus it may be seen that if a displaced operator were allowed to bump any junior telegrapher, half the operators on the line might be forced to move before the result of one change at the top had filtered through to the bottom of the list. Since telegraphers and agents are on the same roster, an operator or agent-telegrapher ("operator" and "telegrapher" are synonymous terms) who is about to exercise a bumping privilege usually exercises discretion so as not to get into a job which he cannot handle.

The same is true in the clerical service. For example, a call-boy would not be likely to bump onto a ticket-clerk job because in all probability he would not have had the necessary training for the job. While the clerks usually are allowed to bump any junior clerk, the greater variation in skills required and the fact that some of the positions are on an office seniority basis prevents the bumping process from causing as much moving about as it would in a more standardized service as explained in the preceding paragraph.

The seniority opportunity afforded by the recall clause.—Eventually improvement in business conditions, attrition of the forces, or both, will force the industry to increase its active forces. Under the recall clause the company must recall its laid-off employees before it hires new ones unless the laid-off employees have not been used for such a period of time as to have been automatically dropped from the employee rolls and seniority roster. The length of this period is specified in the agreements. Formerly it was often ninety days, but during the depression of 1929 so many employees lost their seniority in this manner and the losses were so severe—half a working lifetime in numerous cases—that many unions have successfully bargained since then for a greatly extended automatic termination clause; in many cases it has been eliminated entirely. If this clause is absent, the company must recall *all* the laid-off employees in the order of their seniority before it can hire new employees; otherwise it must recall in seniority order all laid-off employees who have not yet fallen victim to this clause.

SUMMARY

The true origin of seniority as a custom is lost in antiquity; formal codifications of the custom are of comparatively recent date, however. The first of such codifications in this country seems to have been in the military—coming directly from the British military practice. The first industry in which a formal seniority system developed was the railroad industry.

The causes for its formal development first in the railroad industry rather than in some other industry can be traced largely to the fact that the railroad industry changed from one of local character to one involving great centralization of ownership and absenteeism. The results were, first, an industry of which the needs, from an organization standpoint, were markedly similar to those of the army and, second, an industry in which favoritism reached the proportions of a curse. The resulting desire or demand of the employees for a closer observance of the seniority custom resulted in a formal, written recognition of the principle. By the time of the entrance of this country into the World War the train and

engine services had a wide coverage of seniority observance. The other unions, however, had made little more than a beginning in this respect. The Railroad Administration of the federal control era extended seniority to all other railroad employees as part of its policy to preclude labor troubles from interfering with the prosecution of the war.

A year or so after the conclusion of the war the railroads were returned to their owners. As part of the program of returning them in the same condition as that in which they were received, all working conditions which had been established during the war were abrogated. By collective bargaining and by recourse to the government's board which had been set up to deal with railroad labor disputes, the employees have been able gradually to recapture the seniority privilege.

It is fairly certain that the percentage of railroad employees who are working under formal seniority rules is not less than 95. The phases of job allocation to which seniority is applied have increased: at first seniority was used only as a method of selecting the employees who were to be laid off at a time of force reduction; at the present time seniority is the principal factor of consideration also in promotions and the filling of vacancies. Also the employer is required to recall the employees whom he previously laid off—in seniority order—before he can hire new employees.

In light of the fact that there is a great deal of agitation of non-railroad unions for seniority, it seems that it might be worth while to study the history of its development and the method of its use on the railroads. In a later portion of the study, the seniority system will be evaluated from the point of view of the welfare of the employees, the employers, and society in general.

[To be continued]

DAN H. MATER

SENIORITY RIGHTS BEFORE THE COURTS

DAN H. MATER¹

INTRODUCTION

WHERE seniority is completely incorporated into a personnel system, it is regarded by both the employer and the employees as one of the most important working conditions in the collective agreement.² Among union officials and also among those employees who are thoroughly union conscious there are many who consider the seniority principle scarcely, if at all, less important than the wages and hours clauses of the collective agreement.³ These opinions are of long standing. As much as 25 or 30 per cent of the space in railroad train- and engine-service collective agreements, or schedules as they are called, is occupied by statements involving various phases of the seniority rule. In other industries and in less complicated branches of the railroad service the percentage of space occupied by seniority stipulations is somewhat less.

Within the past few years the importance of seniority has been further demonstrated by the increased attention it has received from unions. In the railroad industry, where seniority first received full recognition, the depression has necessitated many adjustments which, in turn, have affected the seniority arrangements. On the other hand, in industries where collective bargaining has not been the custom—and hence seniority has not been recognized—both A.F. of L. and C.I.O. labor factions of late have placed the seniority principle among the first concessions to be obtained from employers.⁴

¹ Mr. Mater is a Research Fellow in the School of Business of the University of Chicago.

² Harry Henig, *The Brotherhood of Railway Clerks*, pp. 8 and 47.

³ Editorial, *Railway Clerk*, January, 1929, p. 7.

⁴ Raymond J. Walsh, *C.I.O. Industrial Unionism in Action* (New York: Norton, 1937), p. 230.

Only since the depression have seniority cases come before the courts in any number.⁵ The seniority right is intangible in that ordinarily it is difficult to calculate the extent of the harm caused by a disturbance of any employee's seniority; for relief to be fully adequate, specific performance of personal service would many times be required. The discussion which follows attempts to explain how the value of an employee's seniority is affected by any deviation from the seniority conditions that existed at the time his seniority began. It will also be the writer's purpose to evaluate the adequacy of the court protection available to an employee who has suffered a change in his seniority contract. Or, to put the issue another way, in view of the extent to which the law insures the safety of the employee's seniority and in view of the dependence of the employee's seniority contract upon the *status quo* of the original contract provisions, is it wise for the employee to make a contract for the duration of the employment?⁶

An employee's seniority is the length of time he has worked at his present craft skill for his present employer within the agreed geographical area. Any seniority previously gained under another employer, or under the present employer in a former employment, terminated automatically when that relationship ceased. Also, any seniority which an employee may have gained under the present employer in the present employment relationship in a given craft will vanish if the employee transfers to another craft. For example, a fireman who becomes a brakeman does so at the sacrifice of his fireman's seniority. And, finally, any seniority earned in one seniority district is lost if the employee holding that seniority shifts to another district, even though all other factors remain constant. A seniority district may be a shop, an office, a plant, a section of track, or the whole railroad or firm, depending simply upon the agreement. This is a general description. Many exceptions and modifications can be found. The principle may be summarized in negative terms as follows: senior-

⁵ *Rentschler v. Mo. Pac. R. Co.*, 126 Neb. 493, 253 N.W. 694 (1934).

⁶ This article is part of a larger study which is in progress on "The Railroad Seniority System."

ity cannot be transferred between districts, crafts, employers, or previous employments with the same employer.

Since the seniority of every employee is measured as just described, all the employees in a given seniority area and craft together form a chronological sequence of dates of employment. The employees in any other craft in the same area, or the same craft in another area, constitute another and entirely separate seniority relationship. One's relative position in the sequence measures his rights to the jobs in that seniority area. It is unnecessary to explain fully the sometimes highly elaborate rules of seniority application. Employees, through their unions, insist on this method of measuring job rights because they believe that the employer's opportunities to practice favoritism are eliminated, and they justify seniority as a method of job allocation by the following argument: The longer an employee works for a given employer the more valuable he becomes to him, and therefore the more compensation the employee should receive in such form as his choice of jobs within a given grade, promotions to higher grades, and security against layoffs.

The application or manner in which an employee exercises his seniority can be summarized as follows: The senior employee, or the employee with the most seniority, can have the job he wants (bearing in mind the craft and geographical limitations just described) whenever it becomes vacant or whenever his own job is abolished by the company. The man with the next highest seniority has the same privilege except in so far as he is limited by employee No. 1, and so on down to and including the right of preference in examinations for promotion and for part-time jobs, even when those jobs have months of layoff between days of work.

PRELIMINARY DISTRIBUTIONS OF THE SENIORITY CASES

Table 1 shows that there have appeared in the courts to date fifty-seven cases involving seniority, the first being in 1909. It is also evident that in late years there has been an increase in the number of such cases. The largest number to appear in any one year was eight, in 1934. One cause of the increased frequency has been the depression. Although the table shows the peak in 1934,

if consideration is given to the average lag of two years or so between the beginning of the dispute and the final court decision, it appears that the peak in number of cases really occurred during the depths of the depression. The manner in which the depression was responsible will become more evident later when the cases and the complaints are analyzed.

Of the fifty-seven seniority cases which have come before the courts, two occurred in the printing trades, one on an electric railway, one with a bus company, and the remainder on steam rail-

TABLE 1*
FREQUENCY OF CASES BEFORE THE COURTS IN WHICH
SENIORITY WAS THE PRINCIPAL ISSUE

Year	No. Decisions	Year	No. Decisions
1909.....	1	1928.....	1
1916.....	1	1931.....	3
1917.....	1	1932.....	3
1919.....	1	1933.....	3
1920.....	1	1934.....	8
1921.....	1	1935.....	7
1922.....	2	1936.....	7
1923.....	2	1937.....	6
1925.....	1	1938.....	6
1927.....	1	1939.....	1

* C. L. Christenson, "Seniority Rights under Labor Union Working Conditions," *Temple Law Quarterly*, XI, No. 3 (April, 1937), 355-81 (identical table up to 1935).

roads. That such a preponderance of cases has come from the railroad agreements no doubt is due to the fact that an overwhelming proportion of existing agreements, especially those of a detailed nature, are railroad agreements. Also, as shown before, the peak of the cases occurred in the depression years—a period of drastic retrenchment, particularly for the railroads. One would expect, therefore, that such conditions throughout an industry would necessitate many revisions in the agreements and in the working conditions which they serve largely to codify.

A reading of the cases disclosed that thirty-one of them were caused by a change in the seniority rules or in the territorial extent of the seniority district; five were instances in which a previously promoted or transferred employee sought an interpreta-

tion of the pertinent seniority clause that would allow him to return to his old occupation; seven were cases in which the plaintiff alleged that the employer laid him off when there were younger employees working whom he was entitled to displace; and fourteen had miscellaneous or unknown causes. As the description of the groups indicates and as a reading of the cases established, with few exceptions the cases in the first three groups and a few in the miscellaneous group were directly brought about by the employer's altering operations in conformity to the changed needs for transportation or in order to benefit by technological improvements. During the past few years these changes were hastened by the depression.

There remains the task of determining the source of the decision that ultimately caused the alleged injury to fall upon Employee A rather than Employee B. The formal positions of the union, the employee, and the employer in the seniority cases were as follows: All the suits have been originated by a single employee or a small group of employees. True, there have been three cases in which a union lodge sued the central body of its order; but even these may be considered as still within the limits of the generalization. Of the fifty-seven cases, the employer was named the sole defendant in twenty-one, the union the sole defendant in sixteen, and the employer and the union as joint defendants in seventeen. Stated in another way, in forty cases the employer was named a defendant either jointly or solely, whereas the union was named in thirty-three cases as a joint or sole defendant. A railroad adjustment board was named as a joint defendant in three instances.

As not infrequently is the case in lawsuits, the formal naming does not disclose the true source of the threat to the plaintiff. Quite often the injured employee asks the court to enjoin the employer from putting into effect a new roster or an altered agreement which, after more or less arduous bargaining, the union had procured in the interests of the majority of its membership. Usually the employer seeks to administer agreements to harmonize with the union's interpretation for the simple reason that a dissatisfied union is a more formidable opponent than is a dissatisfied individual. A further cause is found in the fact that

quite often a carrier finds it necessary to act before the union is able to arrive at an interpretation. If the union ruling, when forthcoming, be the reverse, the employee who profited by the employer's decision may seek to prevent the railroad from acting upon the union's decision. On the other hand, the employee who stands in a better position as a result of the union's version of the clause in question may sue the railroad for injury suffered during the period between the employer's and the union's decisions.

It was seldom difficult to identify the interested parties. In many of the decisions the court itself named them. In other cases the facts as reviewed by the courts made the identity evident. In a few instances the true position of the union and the employer was obscure. Two points that had to be watched in determining the interested parties were (1) sometimes the employer pleaded disinterestedness seemingly in the hope that it would strengthen his claim that he should not be held liable for damages and (2) when the employer was named a defendant it was necessary to determine whether his interest extended to the principle behind the case. Of course, he was concerned with the outcome of the suit, regardless of the principle, if a decision for the plaintiff would pave the way for a subsequent damage suit.

Of the forty cases in which the employer was named a defendant he was interested in the principle in only fourteen. In three cases in which the employer was not named a defendant it was evident that he was opposed nevertheless to the plaintiff. On the other hand, the union was opposed to the plaintiff-employee in thirteen cases in which it was not named a defendant. In none of the thirty-two cases in which it was named a defendant was the union not truly opposed to the plaintiff. The resultant positions of the union and the employer, therefore, were that the employer was opposed in principle to the plaintiff-employee in fifteen cases,⁷ whereas the union was opposed in principle to the plaintiff-employee in forty-eight cases. The employer greatly

⁷ Christenson, *op. cit.*, p. 359. Christenson pointed out this condition as follows: "It is certain that in at least half of the 42 principal seniority cases [this was in 1936] the employer was indifferent as to the outcome." Fully half of these fifteen cases originated in court before 1934—the date when the government's railroad labor-disputes machinery was brought to its present state of efficiency.

aided the plaintiff in at least one instance, whereas the union gave full aid in two suits and perhaps some aid in six others.

The reader may have wondered why, if the seniority rule is as important as it has been declared to be, more cases involving it have not been before the courts. There are a number of reasons. The very fact that the plaintiff almost invariably has been denied discourages the bringing of seniority cases to the courts. The individual employee has no expert source of information except the union and the employer. If the individual thinks he is injured by the union ruling, the union is closed as an unbiased source and the railroad is neither interested nor obligated to advise the employee.⁸ And since the agreements employ a language that seems ambiguous to those outside, lawyers in general practice are not often expert in their advice. It is quite possible, in view of the complexity of the agreements, that many employees are not fully sensible either of their rights under the agreement or of the extent to which other of their rights are infringed upon by the agreement. In view of this array of circumstances, an employee might hesitate to court the disfavor of either the union or the employer. The type of relief requested is also a clue to the nature of the injury as well as to the reason for the denial of the plaintiff's request.

Only eight cases have thus far been decided favorably for the plaintiff: declaratory judgment, once;⁹ injunction solely, three times;¹⁰ damages solely, three times;¹¹ and injunction and damages, once.¹² In some half-dozen additional cases it was evident that the plaintiff was right as far as the principle was concerned. For example, in two cases the court stated that a breach had occurred and that if action were brought properly damages would

⁸ *C.R.I. & P. v. Sawyer*, 176 Okla. 446, 56 P. (2d) 416 (1936).

⁹ *Piercy v. L. & N. R. Co.*, 198 Ky. 477, 248 S.W. 1042 (1923).

¹⁰ *Stephenson v. N.O. & N.E.R. Co.*, 180 Miss. 147, 177 So. 509 (1937); *Gregg v. Starks*, 181 Ky. 834, 224 S.W. 459 (1920); *Griffin v. Chicago Union Terminal Co.*, 13 F. Sup. 722 (D.C. Ill., 1936).

¹¹ *McGee v. St. Joseph Belt Ry. Co.*, 92 Mo. 208, 93 S.W. (2d) 1111 (1936); *Rentschler v. Mo. Pac. Ry. Co.*, 126 Neb. 493, 253 N.W. 694; *George v. C.R.I. & P. Ry. Co.*, 183 Minn. 610, 235 N.W. 673 (1931).

¹² *Robinson v. Dahm*, 159 N.Y.S. 1053, 94 Misc. Rep. 729 (1916).

probably be granted.¹³ But even this adjustment does not make a very high ratio of grants to denials.

HOW CHANGES IN SENIORITY RULES AND ROSTERS AFFECT
VALUE OF AN EMPLOYEE'S SENIORITY

In order to discern the reasons for the plaintiffs' lack of success it is not only necessary to inquire into the facts and terms of the contracts involved but it is necessary also to inquire into the attitude of the courts toward agreements as contracts, particularly where adequate relief from injury under such contracts may require nothing short of specific performance of personal service—a type of involuntary servitude. And also, before very much can be understood of the nature of the seniority contract, something must be known of the practical day-to-day application of seniority.

Under either the seniority rule or the merit system the employer picks the jobs he wishes to dispense with, but under the seniority system he cannot select the employees he wishes to lay off. Instead, each of the employees holding the jobs that have been abolished simply looks around and takes the job of any man junior to him—bearing in mind the craft and district limitations explained earlier. Sometimes it is not as simple as this—in fact, it rarely is—but to elaborate the picture would not be helpful. Under both systems there occurs a great deal of shifting when the force is enlarged or contracted. The effect to note at the moment is the fact that the individuals who would be selected under the two systems certainly would not be the same ones.

At first thought it might seem that it would make no difference what kind of a seniority district exists when the carrier is making changes in the operating divisions, but it makes a very great difference to the employees. If the area from which ten jobs are to be removed is one seniority district, then eventually the ten junior employees in that craft and district will be unemployed. But if that area is composed of two districts, to make it simple, the ten men who would be out of the employment would not be

¹³ *Hamilton v. Rouse*, 178 App. Div. 81, 165 N.Y.S. 173 (1917); *McCoy v. St. Joseph Belt Ry. Co.*, 229 Mo. App. 506, 77 S.W. (2d) 175 (1934).

the same ten. Every method of combining the rosters would cause the burden to fall upon a different ten individuals.

But regardless of whether or not any reduction of jobs results from a combination of rosters, each of the employees, with few exceptions, will find himself a different distance from the top on the new roster than was the case on the old roster. To some this will appear as a windfall, to others it will amount to a cheapening of their seniority. It may appear that an employee holding fifth position, for example, on a seniority roster of one hundred employees would be in just as advantageous position if, after his roster were combined with another, he found himself in tenth position among two hundred employees. But rarely indeed do all the employees occupy the same relative position following a combining or dovetailing of rosters. In fact, it would be impossible on a large roster. First position, for example, may be held on one roster by a man with forty years' seniority, whereas on the other roster first position may be held by a man with fifty years' seniority. It might easily happen that there would be several on the second roster with more than forty years' seniority.

As will be seen in a moment, dovetailing of rosters is not the only way of dealing with situations created by the carrier's changing the extent of the operating divisions. Some of the carriers' arrangements that necessitate changes in the operating divisions, which in turn require actual combining of rosters, or other treatment which in principle amounts to the same thing, are joint-track agreements, abandonment of branches or tracks or maintenance facilities, the extension of the aforementioned, or the sale of the road or a portion of it. These circumstances may result in an operating division's being abandoned entirely, added to another division divided among two or more divisions, or combined with parts of one or more to form an additional division. The variety of possible arrangements is large, and the difficulty of making the necessary compensatory seniority roster adjustments in the seniority districts affected is extremely great. An actual example may aid the reader to obtain a clearer picture of the difficulties involved.

The case of *Gordon v. Hawkins*¹⁴ is unusual in that it was occasioned by an extension of track rather than an abandonment. However, the problems created are substantially similar. Two main lines of a railroad formed the apex of an acute angle. The sides of this angle composed two separate operating divisions and, in this case, two seniority districts for train and engine crews. Both divisions were under the jurisdiction of the same superintendent. Some new line was built, which amounted roughly to completing the triangle. There were enough furloughed train- and engine-crew employees to make it unnecessary to hire any. Now the problem was: Should the new line constitute a new seniority district, be added on to one or the other of the two existing districts, be split between them, or be combined with them to make one large district? Perhaps the view may be taken that in such circumstances the new jobs should be divided among the two rosters so that everyone would benefit by getting more part-time work, a full-time job instead of a part-time one, or a better full-time job. If so, by what method should it be accomplished: a fifty-fifty basis, in proportion to the number of employees on the two divisions, in proportion to the mileage of the two divisions, in proportion to some other unit of measurement of the relative importance of the two divisions, or in such a manner that the senior idle employee on one division would be of the same seniority as the senior idle employee on the other division? This list of possibilities is by no means exhaustive. Only a group of railroad men with their ingenuity under the full spur of such a situation could note all the possible alternatives.

In the foregoing illustration only the train- and engine-crew employees had operating divisions as seniority districts, whereas most of the other employees, such as telegraphers, had as their seniority districts the superintendent's division.¹⁵ Therefore, since the change for the telegraphers involved only one district, no difficulty was experienced. Over half the cases have been caused by some change in the extent of the operating divisions which

¹⁴ 66 S.W. (2d) 432 (Tex. Civ. App., 1935).

¹⁵ This is the typical arrangement.

necessitated compensatory changes in the respective seniority districts.

The foregoing type of change in the seniority conditions was in the extent of the seniority district. Another type of change is in the rules themselves. Naturally there are many ways in which the seniority rules can be changed, but one example will suffice. In *Hartley v. Bro. of Ry. & SS. Clerks*¹⁶ the railroad company during the depression received numerous complaints because there were married women in its employ while there were numerous men as heads of families without employment. The railroad was willing to dismiss the married women for reasons of its own; all clerks who held less seniority than these individuals stood to advance with their removal; and union officials were amenable to the suggestion since, among other reasons, only a small loss of membership would be entailed. Therefore, all married women, unless extenuating circumstances existed, were relieved of their positions—seniority rights accumulated under a prior set of rules notwithstanding.

All the changes in the seniority structure, whether in the rules or in the extent of the district, are the result of the union's bargaining with the employer. With the exception of a few isolated cases where a union official used his power for his personal interest,¹⁷ or with the aim of discriminating against one or more non-union employees,¹⁸ these changes have been made in good faith for the benefit of the majority of the membership.¹⁹ Personal ani-

¹⁶ 283 Mich. 201, 277 N.W. 885 (1938). *Brisbin v. Bro. of Ry. & SS. Clerks*, 134 Neb. 517, 279 N.W. 277 (1938), is closely similar.

¹⁷ *Stephenson v. N.O. & N.E. R. Co.*, 180 Miss. 147, 177 S. 509 (1937); *McGee v. St. Joseph Belt Ry. Co.*, 92 Mo. 208, 93 S.W. (2d) 1111 (1936); *McCoy v. St. Joseph Belt Ry. Co.*, 229 Mo. App. 506, 77 S.W. (2d) 175 (1934).

¹⁸ *Piercy v. L. & N. Ry. Co.*, 198 Ky. 477, 248 S.W. 1042 (1923); *Gregg v. Starks*, 81 Ky. 834, 224 S.W. 459 (1920); *Ledford v. C.M. & St.P.R. Co.*, 298 Ill. App. 298, 18 N.E. (2d) 568 (unpublished, 1939).

¹⁹ *Franklin et al. v. Penn-Reading Seashore Lines et al.*, 122 N.J. 205, 193 A. 712 (1937). ". . . I was impressed, during the hearing of this cause, with the zeal of the men to protect their rights, and also with the honesty of purpose, good faith, and desire to do justice, displayed by the representatives of the brotherhoods, as well as the international officers and board of directors to whom appeals were made, and with the fidelity with which their duties were performed."

mosity of the employer toward the plaintiff²⁰ or favoritism toward an employee²¹ seems to have been the chief cause in four cases.

The seniority principle differs from any other condition of work in a way which makes its inclusion in a contract especially significant. It is quite possible for an increase in the wage rate to cause the company to reduce the force, with the result that not even all the union members will benefit by the union's effort; but most of the union's efforts may be said to benefit the overwhelming majority of the union members. The effect on nonmembers or outsiders desiring employment is not here under consideration. Now, under the seniority system a change in the rules or in the extent of the district—which is equivalent to a change in the rules—has an effect resembling that which would be experienced by an apprentice who, after he had almost completed the four years of his apprenticeship period, was told that in behalf of the majority of his brotherhood the period had been lengthened to five years and he would therefore have to serve an additional year as an apprentice.

THE PROTECTION OF THE SENIORITY RIGHT AFFORDED BY THE COURTS

Since seniority exists by virtue of the efforts of the union,²² the willingness of the courts to protect an employee's seniority will depend partly upon whether they consider the collective agreement as a contract. On this point the courts are not in complete agreement.²³ It would seem that those who do not so

²⁰ *Rentschler v. Mo. Pac. Ry. Co.*, 126 Neb. 493, 253 N.W. 694 (1934); *Beatty v. C.B. & Q. Ry. Co.*, 49 Wyo. 22, 52 P. (2d) 404 (1935).

²¹ *Griffin v. Chicago Union Station Co.*, 13 F. Sup. 722 (D.C. Ill., 1936); *Lane v. Union Terminal Co.*, 12 F. Sup. 204 (Tex., 1935).

²² Only in one case did a court in any way indicate that it felt that seniority was a custom prior to the collective agreements. While an employee holds seniority with his employer and not the union, he holds it in accordance with the conditions contained in the collective agreement. In *Piercy v. L. & N. R. Co.*, 198 Ky. 477, 248 S.W. 1042 (1923), the union made a ruling, to which the carrier acquiesced. The court ruled that since the plaintiff had held the job long previous to the coming of the union, and since the effect rested on one man only, the change could not be upheld.

²³ *Rentschler v. Mo. Pac. Ry. Co.*, 126 Neb. 493, 253 N.W. 694 (1934). The court in this decision quotes with approval *Yazoo & M.V. R. Co. v. Webb*, 64 F. (2d) 902

hold would therefore consider the collective agreement as a mere offer of terms by the employer, which terms he has bound himself to the union to offer;²⁴ on this last point some courts would say, "which terms he has bound himself to the union's officers to offer."²⁵ In other words, some courts dispute the ability of an unincorporated institution²⁶ to make contracts. Those who hold the collective agreement to be a mere offer of terms by the employer further disagree as to what constitutes acceptance by the employee. One of the reasons why they do not see alike on the foregoing questions is that they disagree as to whether the union is an agent or a principal.

It is the opinion of the author that in the bargaining relationship between the employer and the union the latter acts not as a principal²⁷ but as an agent with power to bind. It is not illogical to consider the union as a principal in its dealing with the employees, but it is the employer-employee relationship that is the important side of this contractual triangle. Since one who joins a union binds himself to abide by the brotherhood constitution and bylaws²⁸ and by the terms of the collective agreement, the collective agreement is ratified automatically with its consummation. Since this precludes the need of later ratification, the collec-

(a nonseniority case), as follows: A contract between the employer and its employees in itself "can rarely be a subject of court action because it is incomplete. It established no concrete contract between the employer and the employee. . . ." This position seems also to be taken in *Mosshamer v. Wabash Ry. Co.*, 221 Mich. 407, 191 N.W. 210 (1922), and *Boucher v. Godfrey*, 178 Atl. 655 (Conn., 1935). It seems quite certain, however, that this is not the view of many courts.

²⁴ There were nine decisions in which it was more or less definitely stated that the collective agreement binds the employer merely to offer the agreed terms of employment to the employees. These cases will be reviewed later in the article.

²⁵ Christenson, *op. cit.*, p. 362.

²⁶ Justice Paine, in *Rentschler v. Mo. Pac. Ry. Co.*, 126 Neb. 493, 253 N.W. 694 (1934), remarks that government reports show that in 1929 only 14 of the 148 large unions were incorporated.

²⁷ In only one case did a court state that the union is a principal and not an agent (*Donovan v. Travers*, 285 Mass. 167, 188 N.E. 705 [1934]).

²⁸ The principle is well stated in *Robinson v. Dahm*, 153 N.Y.S. 1053 (1916), as follows: "Such a set of laws . . . creates obligations that can be enforced among the members and between the members and the order."

tive agreement cannot be a mere offer of terms by the employer to the employee.

The next question is: Can either an agent or a principal conclude a binding contract between two other principals (the employee and the employer)? Now, a principal can make a contract between two other principals, provided it is accepted or ratified. Such a ratification is nothing more than a post-authorization of agency. But the union has already bound its members to accept the collective agreement; therefore, the union is an agent with power to bind.²⁹

Under either the agency theory or the principal theory, non-union employees can protect themselves through the principle of third-party beneficiary rights.³⁰ What has actually come to be the practicable situation is that an employee who is dissatisfied with a union ruling is limited to protesting, quitting the employ, or changing the agreement by voting into power more satisfactory bargainers. In fact, this situation very much resembles that which exists between the individual and his government—and in this country, at any rate, it would still be vehemently contended that the government is the agent of the individual.

Of the fifty-seven cases studied there were thirty-eight in which the court in so many words stated, or indirectly indicated,

²⁹ Christenson, *op. cit.*, p. 270: "One finds the conclusion emerging that in these seniority cases there is a clear tendency to treat the union as an agent, bargaining as the representative of its members."

³⁰ In *Y. & M.V.R. Co. v. Sideboard*, 161 Miss. 4, 133 S. 669 (a nonseniority case), the court clearly states the attitude of the courts on this question. Also the statement of the present acceptance aptly describes the situation as the author finds it in the seniority cases: "... The time has at last arrived when labor union contracts are no longer construed with hesitancy and strictness but are accorded the same liberality which is given to other agreements, so that while a few years ago courts were holding that an individual member of a labor union could not maintain an action for breach of an agreement, as in the Hudson and Burnetta cases, the holdings now are that these agreements are primarily for the individual benefit of the members of the organization, and that rights secured by these contracts are individual rights which may be enforced directly by the individual." The court cites a long list of supporting decisions.

In no case was an interested third party refused relief on the ground that the contract did not purport to speak for him. The only question that arose was whether or not he had ratified the agreement. This point will be dealt with again.

that membership in the union or mere employeeship constitutes ratification of the collective agreement.³¹ In those cases in which the court did not specifically state its views on this subject, the court was so categorized if one or more of the following statements appeared in the decision:

1. The union was within its powers to act for the majority.
2. Court review will not be granted until all union methods of adjudicating disputes between itself and its members, or among its members, have been exhausted.
3. This court will not enjoin a union unless its methods for settling the dispute overly delay justice.
4. A union must apply the general law of contracts in its constitution.
5. A union's changes in the constitution, bylaws, and collective agreement must be for the general good.
6. The wisdom of the union constitution will not be questioned by the court.
7. Plaintiff did not protest the decision agreed upon by the employer and the union within the time limit for protests.

This figure becomes more significant in view of the fact that there were fifteen cases which were not of a nature to necessitate comment on this point, particularly among the cases which were thrown out of court for such reasons as extremely poor pleading and/or lack of essential parties.

Nearly all the most interesting cases fall into one or more of the following categories:

1. Cases in which a breach was recognized but relief refused—six cases
2. Cases in which a breach was recognized and relief granted—eight cases
3. Cases in which the collective agreement was not considered to become the individual's work-contract automatically with the consummation of this agreement—nine cases
4. Cases which were not tried on their merits—three cases

Briefs of the most fruitful of these cases follow:

³¹ In five of these cases the court stated or intimated that mere employeeship is sufficient ratification. But, owing to the paucity of cases in which the plaintiff was a nonunion employee, this figure undoubtedly understates the number of courts who hold this opinion.

One question that no court specifically commented on is: Must an employee who is not a member of the union, but who thinks he is injured by the union's ruling, go through all the adjudicatory machinery provided by the union before a court will grant that a breach exists? Presumably not. In this respect a nonunion employee perhaps has an advantage over the employee who is a union member.

In *McCoy v. St. Joseph Belt Ry. Co.*³² two rosters were dovetailed following a merging of two railroads. There was evidence of collusion between one of the railroad officials and the brotherhood man who was called from headquarters to aid the locals in combining the rosters. While such collusion would be an undue exercise of authority and therefore would need ratification in order to become binding, the court did not decide on this ground. Rather it held that continuing to work did not constitute ratification. It is not clear what the decision would have been, had there been no evidence of collusion or what effect obtained from the fact that the plaintiff had immediately and continuously dissented. The plaintiff was refused relief, however, on the ground that the computation of injury did not appear sufficiently accurate.

In *McGee v. St. Joseph Belt Ry. Co.*³³ the same court granted damages. The entire case was identical with the case above in every respect except that the plaintiff was able to convince the court that he would never have lost a single day's work had he not suffered interference with his seniority.

In *George v. C.R.I. & P. Ry. Co.*³⁴ the plaintiff was discharged. The union representative interceded in his behalf and obtained his reinstatement, but in order to do so he promised the employer that George would not claim back pay. George convinced the court that he never authorized the union representative to act in his behalf and that he was entitled to damages for time lost. The court ruled that George's acceptance of the reinstatement was no bar to recovery of wages lost. While it is probably true that the representative exceeded his constitutional authority and lacked specific authority, it still is difficult to see from the court's syllabus of the case how the court could allow the plaintiff to ratify "in part" the reinstatement contract.

In *Rentschler v. Mo. Pac. Ry. Co.*³⁵ a "senior" employee whose job had been abolished was not allowed to displace a "younger" man. The company claimed that he was not competent for the

³² 229 Mo. App. 506, 77 S.W. (2d) 175 (1934).

³³ 92 Mo. 208, 93 S.W. (2d) 1111 (1936).

³⁴ 183 Minn. 610, 235 N.W. 673 (1931). ³⁵ 26 Neb. 493, 253 N.W. 694 (1934).

type of work involved. The jury found otherwise, however. In the decision the court said that the collective agreement becomes binding when adopted into and made a part of the individual contract of each employee. It is surprising, however, that the court then quotes with approval from a nonseniority case, *Y. & M. V. v. Webb*,³⁶ as follows: "... A contract between the employer and its employees can rarely be a subject of court action because it is incomplete. It establishes no concrete contract." A similar view seems to have been taken in *Mosshamer v. Wabash R. Co.*³⁷

In *West v. B. & O.R. Co.*³⁸ a union man was laid off. Nine months later, while inquiring as to when he might be recalled, he found his name differently placed on the roster. The court stated that the union was not a suable entity, that the plaintiff had not exhausted the union remedies for settling the dispute, and that there was no evidence that the plaintiff had ratified the agreement. It is not surprising that the court found for the defendant, but it is difficult to reconcile with the foregoing comments the further statement "... a contract between a union and an employer if not ratified by the members, the members therefore cannot recover for breach of contract between the carrier and the brotherhood."

In *Moore v. Y. & M.V.R. Co.*³⁹ the court said: "... The effect of the promulgation of this . . . roster was to offer the appellant . . . a new contract. . . ." By not protesting within the thirty-day clause, as required by the constitution, the plaintiffs were deemed to have accepted and the breach of their former contracts was therefore waived. In other words, acceptance was considered automatic unless protested. This thirty-day protest period is an argument against regarding the new roster as a true offer.

In *Brisbin v. Bro. of Ry. & S.S. Clerks* (earlier reviewed)⁴⁰ the

³⁶ 64 F. (2d) 902.

³⁷ 221 Mich. 407, 191 N.W. 210 (1922).

³⁸ 103 W.Va. 417, 137 S.E. 654 (1927).

³⁹ 176 Miss. 65, 166 S. 395 (1936).

⁴⁰ 134 Neb. 517, 279 N.W. 277 (1938).

court said that the collective agreement becomes binding when adopted into the individual contracts, but then it continues as follows: “. . . There must be some agency vested with authority to represent and bind all the employees . . . whether or not they are members. . . .”

In *Stephenson v. N.O. & N.E.R. Co.*⁴¹ the dispatchers' agreement read: “Seniority shall be limited to one superintendent's jurisdiction. . . . When for any reason two or more dispatchers' offices are consolidated, seniority of such offices shall be pooled. . . . If consolidation results in force reduction, if qualified, oldest men shall have prior rights to positions remaining.” The foregoing provision failed to fit the situation exactly, because, when the railroad put the two divisions under one superintendent, it did not operate them as one, but rather it continued to operate them separately under the jurisdiction of one superintendent.

Stange had sufficient seniority to obtain a choice job on the other division, provided the above-mentioned situation were construed as coming under the provision quoted. He was also division representative for the dispatchers, and, as such, he tried to get the railroad to dovetail the seniority rosters. Upon the refusal of the management he took the case to the Board of Mediation under the National Railway Labor Act of 1926. No agreement was reached. In 1934 the act was amended, and Stange repeated his former steps, getting jurisdiction by saying that the dispute was between the dispatchers and the railroad. In spite of the fact that the railroad pled disinterestedness, the Railroad Adjustment Board, through a referee, ruled that the railroad should dovetail the rosters. Thereupon the other dispatchers brought court action. In the proceedings the lower court held that the proper, necessary, and indispensable parties were not present. The higher court ruled that the lower court *did* have such parties before it, and that it should have found for the plaintiff; the higher court then permanently enjoined the railroad from putting into effect the order to dovetail the seniority rosters, saying that the National Railroad Adjustment Board was without jurisdic-

⁴¹ 180 Miss. 147, 177 S. 509 (1937).

tion in the matter because the dispute was not between the employees and the employer but rather among the employees only.⁴²

The court took care to say that the granting of an injunction in this case did not force the employer to retain certain employees in its service, but only made the employer recognize their seniority rights during such time as they might remain in its service. The court further declared that seniority rights constitute "property" within the Fifth Amendment of the Constitution of the United States, that the rights and privileges contracted for in labor agreements are primarily for the individual benefit of union members, and that rights secured by such agreements are the members' individual rights and may be directly enforced by an individual member.

In *Griffin v. Chicago Union Station Co.*⁴³ the plaintiff, a switch-tender, was transferred to other work where he remained for ten years. During that time his name did not appear on his former roster. At the end of that time the company abolished his job, but put his name back on the switchtenders' roster in the same position it would have occupied had he never left that work. Other switchtenders complained, first to the carrier and later to the National Railroad Adjustment Board. The Board ordered the railroad to remove the plaintiff's name from the roster. The judge of the federal court enjoined the defendant carrier from putting into effect the ruling of the Board, saying that since seniority is property within the meaning of the Fifth Amendment of the Constitution of the United States, the Board's failure to notify the plaintiff of the hearing concerning the case was contrary to the Fifth Amendment. This opinion was upheld in *Nord v. Griffin*.⁴⁴

A similar dispute brought about the case of *Lane v. Union*

⁴² This opinion was also stated in *Malone v. Gardner*, 62 F. (2d) 15 (C.C.A. 4th, W.Va. 1932). Curiously, the opposite view was held in *Norfolk & Western R. Co. v. Harris*, 260 Ky. 132, 84 S.W. (2d) 69 (Ky. 1935), and in *Bell v. Western R. of Ala.*, 228 Ala. 328, 153 So. 434 (1934).

⁴³ 13 F. Sup. 722 (D.C. Ill., 1936).

⁴⁴ 86 F. (2d) 481 (C.C.A. Ill., 1936). Writ of certiorari denied in 1937.

*Terminal Co.*⁴⁵ and the contra suit of *Estes v. Union Terminal Co.*⁴⁶ Both contests were appealed and remanded. Again the stumbling block was the failure of the Board to give notice to a party who claimed he had been neither represented at, nor notified of, the Board's hearings. The carrier prevented a final court disposition of the controversy in these suits by obtaining a settlement out of court.

In neither the Griffin nor the Union Terminal dispute was the seniority question fully considered. What the decisions actually implied was that a nonunion employee is not represented before the Board by either the union or the employer unless he specifically designates one of them as his representative, and therefore he is an interested, involved, and separate party with the right under the federal statute⁴⁷ to receive notification of, and be present at, the Board's hearings concerning his property right in seniority. Or, in other words, they have in reality held that the work-contract of a nonunion employee is not the collective agreement unless he so specifies.

In these disputes, as well as in one or two similar cases, it has been held that seniority is a property right within the meaning of the Fifth Amendment. This certainly is not the opinion of the majority of the courts. Even though it were a property right, the point is not well taken in the Griffin and Estes cases. Since a change in the amount of seniority of one person would alter the effectiveness of the seniority of all "junior" employees, the property of all the employees would be interdependent. Therefore it would be necessary that the employer offer the same opportunities to all for the accumulation of seniority. That plan could only be the collective agreement—unless these courts do not consider it possible for a collective agreement to become binding upon an employer. Every schedule provides that any error on a seniority roster must be protested within a reasonable

⁴⁵ 12 F. Sup. 204 (Tex., 1935).

⁴⁶ 89 F. (2d) 768 (C.C.A. Tex., 1937). A strong dissenting opinion was rendered in this decision.

⁴⁷ *Railway Labor Act*, 45 U.S.C.A.

time. But for ten long years the plaintiff in the Griffin case did not protest the complete absence of his name from the switch-tenders' roster. Therefore his seniority had ceased to exist. And furthermore, the carrier could not give the plaintiff any seniority, for to do so would not only be contrary to the provisions for acquiring this right but also an infringement of the similar rights of all "junior" employees.

CONCLUSION

The decisions and comments of the courts reveal a pronounced inclination on their part to view the union as the binding agent of its members to make their work-contract, settle their disputes with the carrier either on the property of the carrier or before the Board, and adjudicate disputes between itself and its members or among its members. The small number of cases in which relief has been granted to the plaintiff-employee is evidence of this attitude. Nonmembers are considered almost as completely bound, in that it is generally conceded that the collective agreement binds the employer to treat member and nonmember employees alike.

It is evident that damages can rarely be an adequate recompense for a seniority injury, because such an injury is of a continuing nature and damages will be granted only for past injury. Even to compute damages for injury already inflicted on seniority, is, more frequently than not, extremely difficult. Yet the courts require an accurate computation before they will grant such relief.⁴⁸ Quite often nothing short of return of the man's job is adequate relief. Yet the courts will not grant specific performance when the effect is to force the employer to rehire an individual honestly undesired.⁴⁹ Some courts simply state that seniority is not a right that a court of equity will enforce.⁵⁰ Others

⁴⁸ *McCoy v. St. Joseph Belt Ry. Co.*, 229 Mo. App. 506, 77 S.W. (2d) 175 (1934).

⁴⁹ *Beatty v. C.B. & Q.R. Co.*, 49 Wyo. 22, 52 P. (2d) 404 (1935); *L. & N.R. Co. v. Bryant*, 263 Ky. 578, 92 S.W. (2d) 749 (1936).

⁵⁰ *Mosshamer v. Wabash R. Co.*, 221 Mich. 407, 191 N.W. 210 (1922); *Shaup v. B. of L.E.*, 223 Ala. 202, 135 S. 329 (1931); *Burger v. McCarthy*, 84 W.Va. 697, 100

have looked farther and on occasion have granted an injunction when the effect was merely to prevent the employer from putting into effect a decision of the union or of the National Railroad Adjustment Board.⁵¹

Nearly all the seniority cases have resulted from changes in the railroads' operating conditions and the efforts of the union to make compensatory changes for the benefit of the majority of its members. The frequency of such changes has increased, in spite of the fact that the number of employees on railroads has decreased from approximately two millions in 1920 to about one million at the present time. One effect of this decrease in the number of employees, together with the generally less favorable employment opportunities, has been the increase in the amount of seniority necessary to attain a preferred job. Therefore, at the present time more years of a man's life are involved in seniority injuries than was formerly the case. Because of the heavy investment in his seniority district which the employee makes by accepting subaverage wages for the first several years in the promise of greater security and higher-than-average income in later years, few contracts can be more important to an individual than one involving seniority.

The trend toward collectivism in both bargaining and dispute adjudication undoubtedly brings to the majority of the individual employees greater income and security. The minority may suffer unduly, however, if the system is pushed to the extreme. Labor tyranny would be just as oppressive as employer tyranny. Perhaps it is impossible for either a political or an industrial de-

S.E. 492 (1919); *Chambers v. Davis*, 128 Miss. 613, 91 S. 346 (1922); *Gore v. Penn. R. Co.*, 144 Misc. 639, 259 N.Y.S. 410 aff'd 236 A.D. 881, 260 N.Y.S. 941 (1932); *Brand v. Penn. R. Co.*, 22 F. Sup. 569 (D.C.E.D. Penn., 1938); *Donovan v. Travers*, 285 Mass. 167, 188 N.E. 705 (1934).

⁵¹ *Stephenson v. N.O. & N.E.R. Co.*, 180 Miss. 147, 177 S. 509 (1937); *Lane v. Union Terminal Co.*, 12 F. Sup. 204 (D.C. Tex., 1935), remanded when appealed; *Griffin v. Chicago Union Station Co.*, 13 F. Sup. 722 (D.C. Ill., 1936), upheld in *Nord v. Griffin*, 86 F. (2d) 481 (C.C.A. Ill., 1936); *Chambers v. Davis* (dissenting opinion), 128 Miss. 613, 91 S. 346 (1922). *Gregg v. Starks*, 81 Ky. 834, 224 S.W. 459 (1920).

mocracy to function so that no individuals suffer, but the peculiar nature of seniority makes any injury thereof doubly severe upon the individual. This is particularly true in view of the present inadequacy of legal remedies for an injury of this kind.

While seniority does not have all the attributes of property, for it cannot be transferred from one individual to another, it is a contract that is vastly more valuable than many things which are considered property. It is conceivable that the poignant results of the harsher aspects of seniority as it is now applied have influenced some courts to feel that the concept of property needs to be extended in order to render more adequate relief. If the railroad unions will relax the narrowness of the seniority rules and districts or agree that the procedure of the Board may be changed to allow individual cases to come before it without union representation—a procedure which some interpret the act as permitting—they probably will benefit thereby in the long run. Also, in view of the cumulative value of seniority, the argument for compensating an individual for the loss of his job through a reduction of forces is much stronger than it is in a nonseniority industry. The principle is equally applicable for instances of lesser seniority injury. This compensation should be made by the person to whom the change constitutes a benefit—whether he be the employer or an employee. It must be realized that with an increase of power over the individual there should go an increase of responsibility toward him.

A STATISTICAL STUDY OF THE EFFECT OF SENIORITY UPON EMPLOYEE EFFICIENCY¹

DAN H. MATER²

FOR many decades the railroad union officials particularly, and the railroad employees in general, have contended that (1) seniority prevents favoritism; (2) the removal of favoritism causes the employees to be contented; (3) contented employees are more efficient than those who are not contented; and (4) the seniority method of selection for promotion, retention in time of layoff, recall from layoff, and vacancy-filling is an accurate one for determining the most efficient and, therefore, the most deserving employees. On the other hand, the majority of railroad officials consider seniority to be a deadening influence upon employee efficiency and ambition.

This article presents a measurement of the effect of seniority upon efficiency. It is based upon a study of the age, seniority, and efficiency data of several hundred railroad employees.

DESCRIPTION OF THE DATA

A discussion of the problems which entered into the creation, selection, and use of the data will not only contribute to the presentation of the general problem of measuring employee efficiency but it will also enable the reader to appraise this evalua-

¹ This is a part of a larger study of the railroad seniority system. Part I, "The Development and Operation of the Railroad Seniority System," which appeared in the October, 1940, and January, 1941, issues of the *Journal of Business*, dealt only with a description of how seniority operates in each of the major branches of the railroad service and the history of its development in that industry. Part II, however, consists entirely of determining the advantages and disadvantages of seniority to the employer, the employee, and society as a whole. A portion of the evaluation, "Seniority Rights before the Courts," appeared in the April, 1939, issue of the *Journal of Business*. In a later and final article more consideration will be accorded the advantages and disadvantages which seniority holds for the welfare of the employee and society in general.

² Lecturer in transportation in the School of Business, the University of Chicago.

cause of the seniority rule, that the junior employees were the ones on furlough. Not only did the juniors in seniority—and, therefore, juniors in age, on the average—bear the heavier share of the unemployment of the time, but also they were probably less able to “bump” into positions as nearly within their ability as were the senior employees. Any advantage this might have given to senior employees could have been offset by the fact that a company is more inclined to complain against certain job allocations by seniority if expensive and important tasks are involved—especially during depressions, when the reduction of expenses is the order of the day. In the second place, since no efficiency ratings were determined for the many employees who were on layoff at that time, it might at first be thought that the efficiency reports would not represent the efficiency of the employee group as a whole. However, it is not the age, efficiency, and seniority of those who are technically employees that is important; it is these factors regarding those who are actually doing the work that is of major importance. And, furthermore, where seniority is not one of the employee working conditions, or unless the layoff is only for a short time, a layoff terminates the employment status. Indeed, while seniority does reduce the rate of labor turnover in a technical sense, to recall employees in seniority order after months or even years of absence constitutes little, if any, true reduction in the separation rate.

THE METHOD OF ANALYSIS

In depending upon the law of averages to reveal a truth, there always arises the question of what to do with those observations which vary widely from the general run.

Increasing the reliability of the results of the study by selection and limitation of the data.—In selecting a method of analysis it was necessary first to determine whether to use all or only a sample of the available data. In view of the fact that the monthly efficiency reports pertained only to approximately eleven hundred employees, it seemed advisable to use all of them.

Because of the variations in the monthly efficiency ratings for any given employee, it appeared advisable to obtain an averaged

efficiency rating for each employee. But since all of the individuals in one report did not appear in all other reports, it became evident that the greater the number of observations used for each of the efficiency averages, the fewer averaged ratings would result. This situation, together with the fact that the company's technique of making the efficiency ratings had been altered from time to time, made it evident that over five ratings for each individual employee would be impracticable.

As a matter of fact, five ratings—if insisted upon—would have cut down the number of observations too seriously. In consequence, all the cases used in this study are the average of three, four, or five ratings; and they were taken from the efficiency reports for the seven months' period beginning with December, 1932. In an overwhelming majority of cases, however, five ratings were obtained from the reports of the first five months of 1933. The median or mid-observation was accepted as the employee's efficiency for purposes of this study.

In summary, after a preliminary survey of the data it appeared that eight hundred or so averaged efficiency ratings would yield more reliable results than eleven hundred or so unaveraged ones; but, on the other hand, further improvement by this method did not appear to justify the further decrease in the amount of data which would have resulted.

Having obtained approximately eight hundred averaged efficiency ratings, the next task was to secure the age and seniority for each of these individuals. The feasibility of so doing had been previously investigated. In fact, what appeared at first as a thoroughly alarming situation was that there was no year common to the three kinds of data: the earliest complete file of seniority rosters was for the year 1935; the social security record—from which the ages were obtained—had been set up in 1937; the efficiency reports were for the year 1933; and the data for this study were gathered in 1939. Because of the different dates of these records, the body of data was further reduced; that is, some employee separations had occurred in the interim. At length, 701 observations remained of the original 1,137 names in the key monthly report.

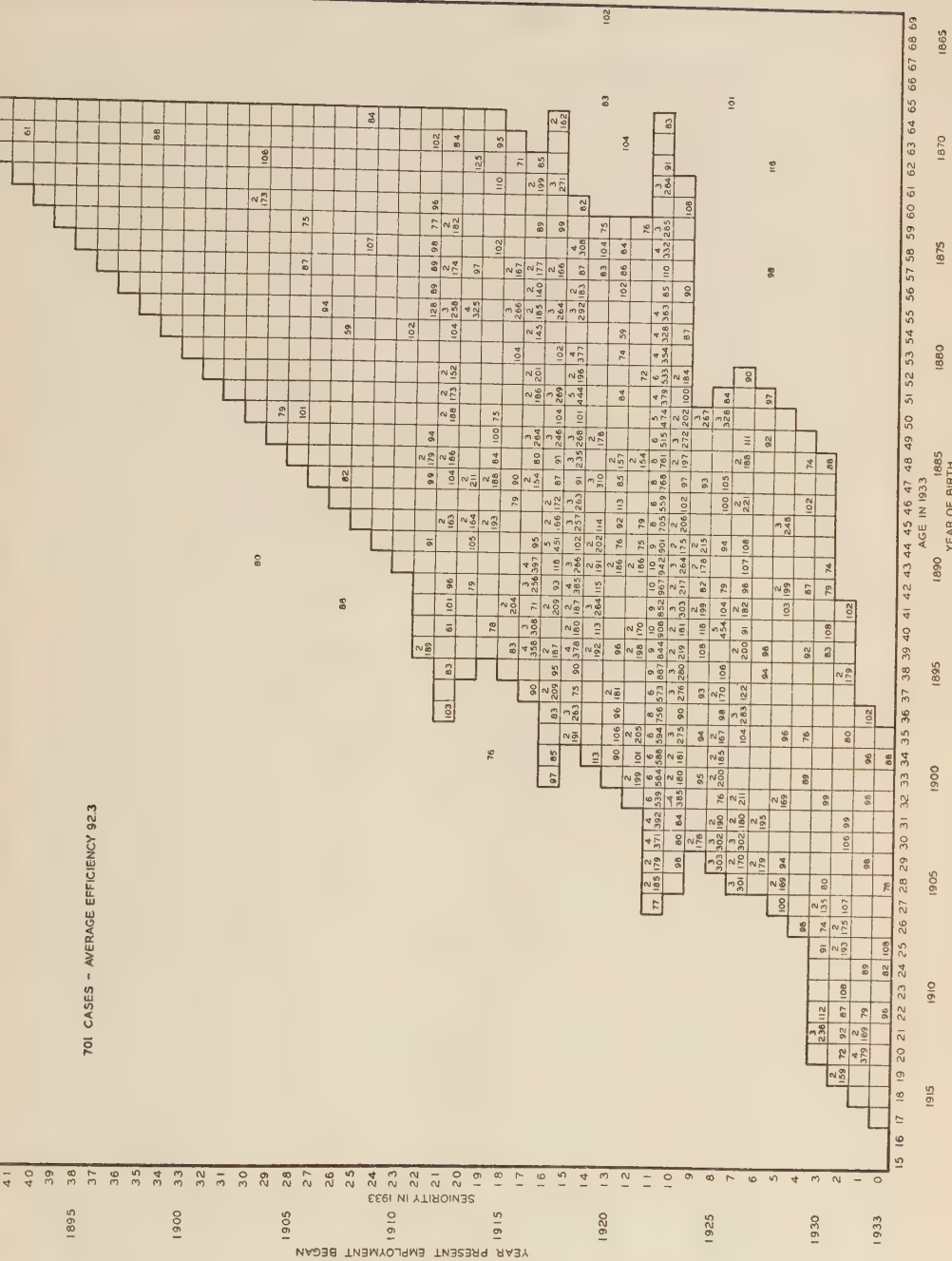
It should not be thought from the foregoing, however, that the age and seniority records were inaccurate. Seniority rosters are always scanned by everyone concerned, and therefore the corrected copies may be accepted as being highly accurate. The security records, since they contain the data basic to the future retirement of the employees, may also be accepted as being highly accurate.

The device of selecting a key report was for the purpose of numbering the names in order to depersonalize the data and thus avoid violating the confidential nature of the material, especially of the social security records. The keyed report was placed in the hands of a company employee who referred to the social security records and called the ages to the author by number rather than by name. The data, of course, were entered opposite the seniority and efficiency ratings of the respectively numbered individuals.

General description of the plan of the charts.—The raw data were transferred to graph paper: one axis of which was used to indicate age, and the other seniority. At the intersection of the age and seniority of a given individual, his efficiency was inserted. In many instances, of course, more than one individual had the same combination of age and seniority. This degree of detail, naturally, could not be shown here; Chart I contains all of the data but in slightly refined form.

The body of data in Chart I is fitted with a perimeter. Chart I and most of the subsequent charts have a dual set of figures for both the vertical and horizontal axes. One set of figures on the horizontal axis indicates the dates of birth of the employees, and the other indicates their age in 1933. One set of figures on the vertical axis indicates the year in which the individuals began to accumulate seniority with this company, and the other indicates their seniority in 1933. A single number in a square indicates the efficiency of the only individual who had that age and seniority combination. In squares which have two numbers, the upper one indicates the number of individuals having that combination of age and seniority, and the lower figure is the total of their efficiencies. For example, six employees were 34 years of age, and each had 11 years of seniority. Their efficiencies totaled 588. This method of tabulation of the data discloses a maximum number of relationships.

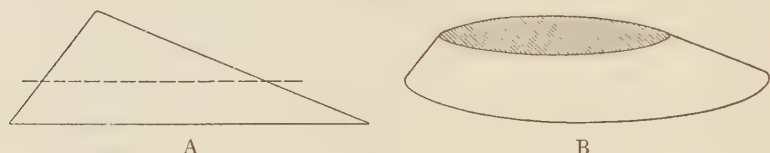
701 CASES - AVERAGE EFFICIENCY 92.3



Determination of the area of above-average efficiency of the "hill" of data.—Since the body of data has three dimensions—length, breadth, and height, represented on the chart by age, seniority, and efficiency, respectively—the body of data may be thought of as a hill, the shape of which it is important to determine. If the height is the same at all points, or if it varies irregularly, the data will show no relationship, causal or otherwise, between age and efficiency or between seniority and efficiency. On the other hand, if the body of data has a well-defined shape, the evidence would indicate that efficiency differs according to seniority, age, or both.

Every hill has an average height. If the present hill of data were to be cross-sectioned horizontally at this height, the average

CHART II



A
Profile of a hill with a plane passed through it horizontally at the weighted average height.

B
Surface exposed when top half of the hill is removed.

This horizontal cross-sectioning is simulated in the study of the data by determining the area of above-average efficiency or height.

efficiency of the employees below that level, of course, would be lower than the average efficiency for all employees; and the average efficiency of the employees above that level would be above the average of the efficiency for all employees. If the top half of the data should come off in one piece and not as the tops of numerous hillocks, the size, shape, and location of the surface exposed by the horizontal cross-sectioning should yield valuable information concerning the age and seniority combinations of the employees who, as a group, are above average in efficiency and also, therefore, of the relationships—causal as well as the merely attendant ones—which may exist between age and efficiency, seniority and efficiency, etc. The method used here for determining the area of above-average efficiency simulates a description of the size, shape, and location of the surface which would be exposed if such a hill existed and were cross-sectioned horizontally at its

weighted average height. Chart II presents a simple illustration of the surface which would be exposed if a hill were cross-sectioned horizontally.

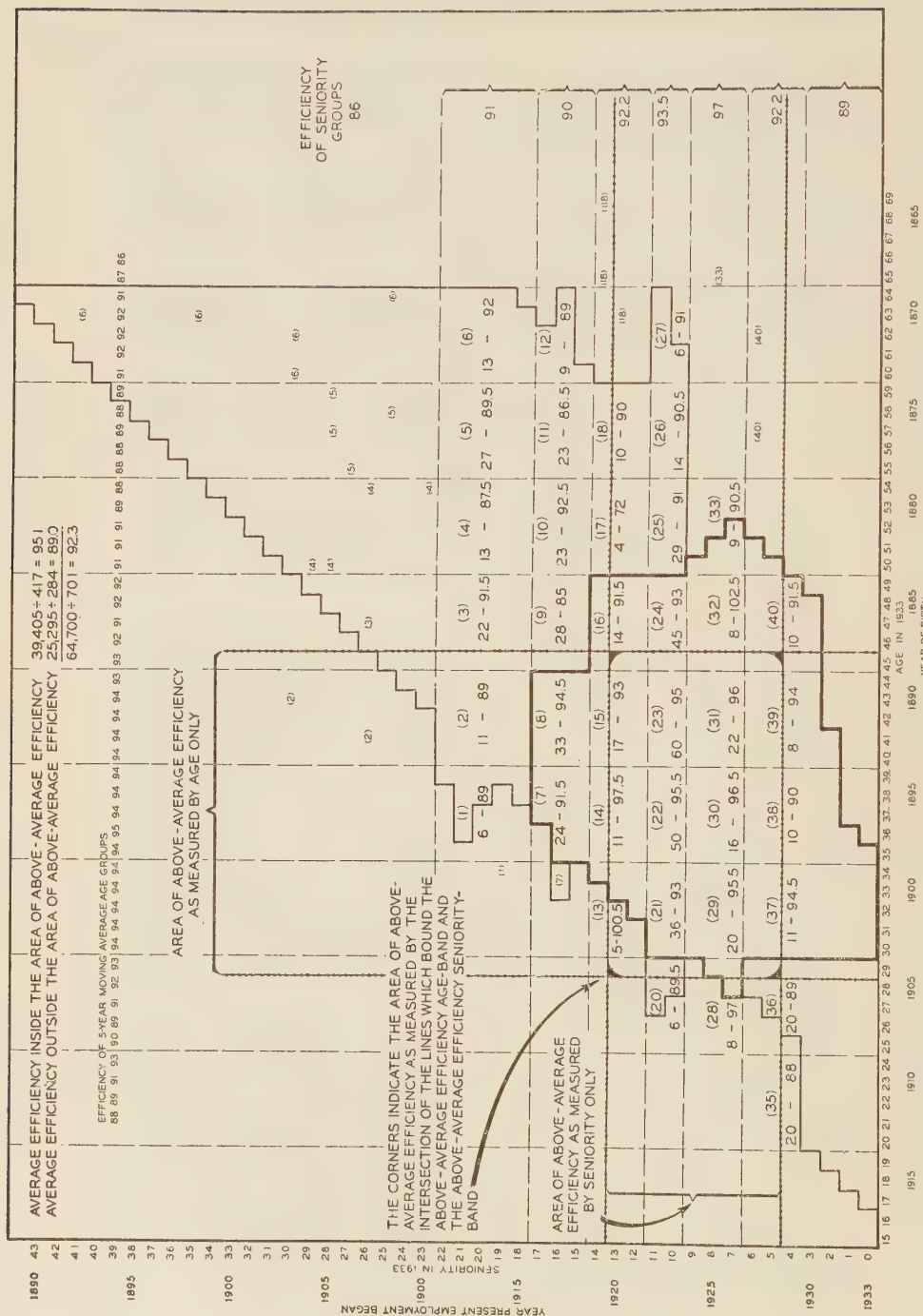
Since squares containing above-average efficiency ratings occur in all sections of the chart, and since there is no section of the body of data which does not contain an occasional above-average efficiency rating, it becomes necessary to make the unit of comparison larger than a single square. In Chart III compartments are formed by the intersection of age group lines and seniority group lines. The distance between the seniority group lines varies, and, therefore, the compartments are not squares. This variation was necessary in order to make the seniority groups coincide with variations in the state of labor market. The data falling in each compartment are summarized by three figures: the number of the compartment; the number of observations contained in the compartment; and the average efficiency of the individuals falling therein.⁴

There also appears in Chart III an inner perimeter inclosing those compartments in which the average efficiency is greater than that for the whole body of employees. The average efficiency for the whole body of data is 92.3. It will be noted that an occasional compartment in which the average efficiency is slightly lower has been included within the inner perimeter, and also that an occasional compartment in which the average efficiency is slightly higher has been excluded. This was done for the purpose of smoothing the outline. Furthermore, such exceptions usually consisted of compartments in which either the number of cases contained therein were too few to yield a reliable average, or the average was a border-line case.

Since much of the interpretation of the data depends upon the size, shape, and location of the area of above-average efficiency, and since the number of cases in the whole study is comparatively small, it is very necessary that the area of above-average efficiency be allowed to assume its inherent form rather than be

⁴ The small numbers in parentheses indicate the compartments in which isolated cases were averaged. All averages, including 5-year moving averages, are simple arithmetic means, except that for the efficiency of each individual in this study the median of three to five ratings was used.

CHART III



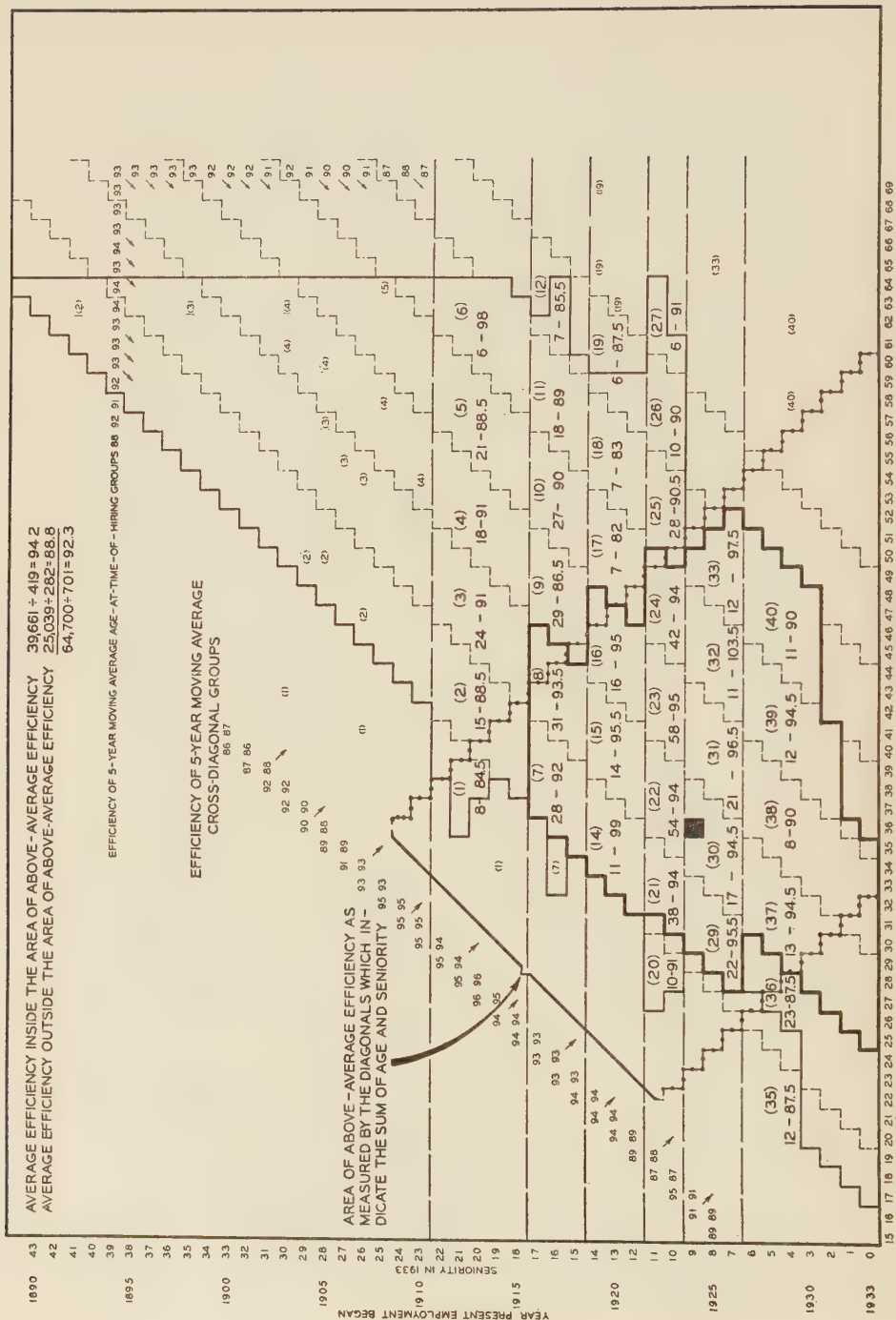
"molded," so to speak, by the form of the compartments themselves. For example, a toy balloon which, without restriction, would inflate into a sphere will, if inflated tightly inside a box, assume much the shape of the box. Therefore, two other methods or directions of compartmenting will be used, and the area of above-average efficiency as determined by the three methods compared.

In Chart IV compartments are formed by the intersection of seniority and age-at-time-of-hiring group lines. (The compartments in Chart III, on the other hand, were formed by the intersection of seniority and age group lines.) The stair-step lines leading to the right have a peculiar significance: all of the individuals on any such line were hired at the same age; this age-at-time-of-hiring is indicated at the foot of the line. For example, those who now have 5 years of seniority and are 30 years of age were hired when they were 25 years old. So, also, were those who are now 26 years old and have 1 year of seniority. This comes about in the following manner: since an employee by getting a year older "moves" to the right one age square and upward one seniority square, the "resultant," or "path of his movement," leans to the right at 45° from his age at the time he began his present employment. The grouping of the employees on this basis is arbitrarily in 5-year periods and utilizes the same division points as the division by age groups; that is, 20-24, inclusive, etc.

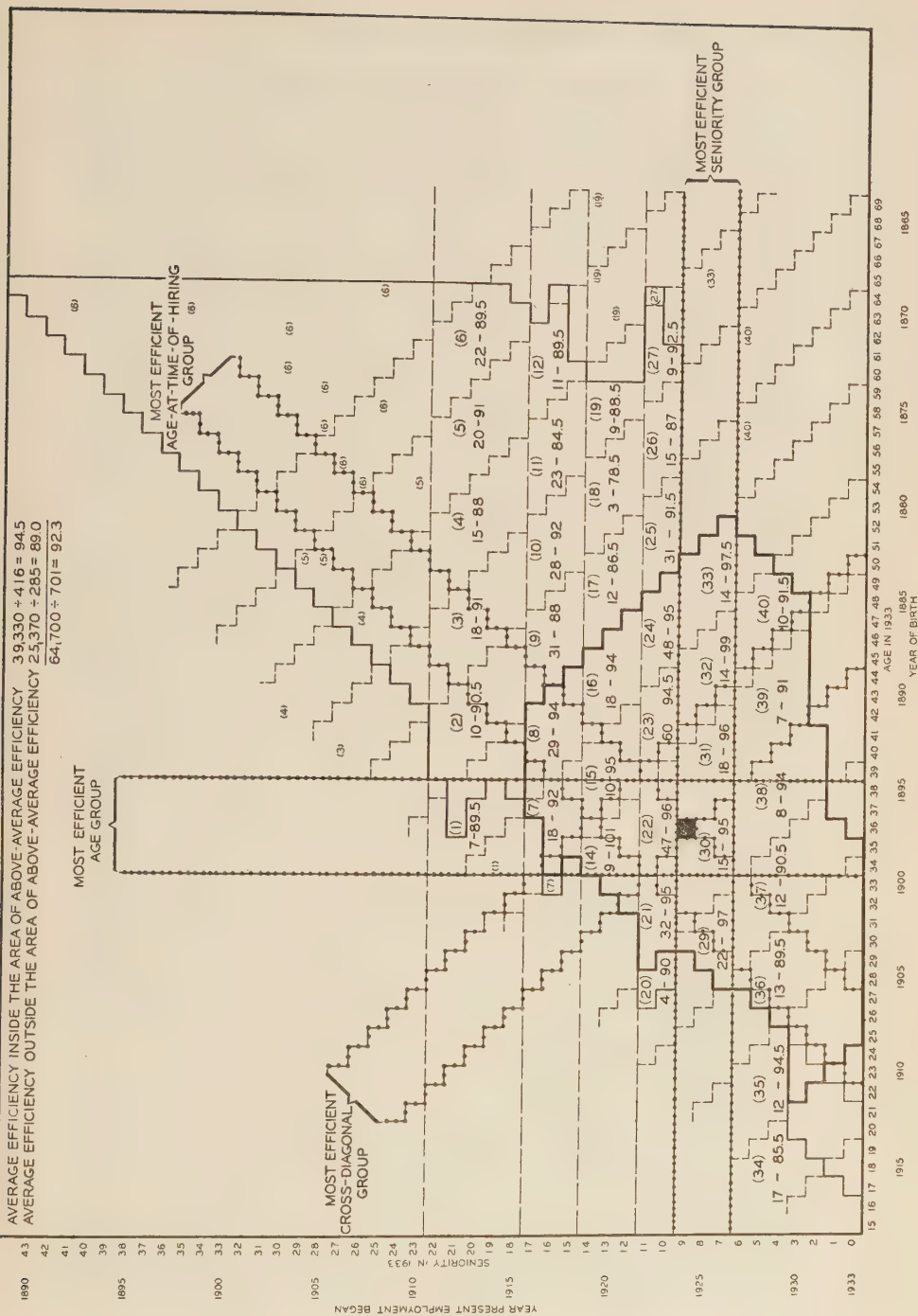
By this method of compartmenting, the area of above-average efficiency is drawn to include two or three below-average compartments and to exclude one or two which are above average in efficiency. The justification for so doing follows the same principles as already stated in regard to Chart III. The same is also true in regard to Chart V.

In Chart V the data are compartmented by means of seniority groups lines and cross-diagonal lines. In addition to presenting a third idea of the size, shape, and location of the area of above-average efficiency by the compartmental method, these diagonals indicate the sum of age and seniority; the diagonals in Chart IV, on the other hand, indicate the difference between age and seniority. The peculiar significance of the cross-diagonal lines will become more apparent later.

CHART IV



AVERAGE EFFICIENCY INSIDE THE AREA OF ABOVE-AVERAGE EFFICIENCY $39,330 \div 416 = 94.5$
 AVERAGE EFFICIENCY OUTSIDE THE AREA OF ABOVE-AVERAGE EFFICIENCY $25,370 \div 285 = 89.0$
 $64,700 \div 701 = 92.3$



RELATIONSHIPS OBSERVABLE IN THE DATA

The hiring-age policy of a company is the initial determinant of the age and seniority distribution of its employee group. The effect of changes in the hiring-age policy and the effect of variations in the labor market are pertinent factors in the study of the effects of age and seniority upon the efficiency of employees.

Hiring-age policy of the company.—One of the principal purposes in drawing a perimeter about the whole body of data was to facilitate a demonstration of the fact that not only has the age-at-time-of-hiring varied but the hiring-age policy itself has been changed. In other words, in addition to compulsory departures from a given hiring-age policy, there also has been a change in the policy itself. The perimeter is drawn so as to reveal all changes in the hiring-age range.

In most of the charts may be seen a perimeter about the whole body of data. However, Chart I shows not only the perimeter but also the actual data, and therefore, the density. The differences in density—automatically grouping certain years as belonging together—are as indicative of the variations in the state of the labor market in the past as are the changes in the range of age-at-time-of-hiring. All except one of the seniority groups which have a great age range were hired in an unfavorable labor market:⁵ the strike of 1922-23, the war period of 1916-18, and another strike back in 1912.⁶ Until about 1930 it can be seen that the hiring-age range or age-at-time-of-hiring during normal times was about 20-45. It is evident that, since 1930, the upper limit has been lowered to about 35. On the other hand, instead of the lower limit being higher than it was during unfavorable labor-market conditions, it is as low as it ever has been and much lower than the preceding periods of prosperity and normalcy.

In view of the fact that 1930-33 was a depression period during which the company easily could have filled its needs from any

⁵ The term "unfavorable labor market" simply means here that the company was forced by its abnormal needs for employees to hire a greater proportion of applicants than usual.

⁶ It will be noticed that the upper or "old" end of this group has been cut off by retirement. The perpendicular line at this point marks the age when separation becomes rather general. This line might have been located somewhat differently with equal justification, but any error in this regard is without consequence.

age group it chose, it must be concluded either that the company changed its policy in regard to desirable ages for new employees or that in recent years worthy applicants more frequently have been under 25 years of age and less frequently over 35. The former possibility, of course, is the more likely.⁷

Some question might be raised concerning whether or not the data are sufficient to justify a conclusion that the company has changed its policy. First, it might be pointed out that the "young" end of this seniority group will suffer a heavy separation rate within the next few years, owing to the greater restlessness of youth, and, therefore, the range of age-at-time-of-hiring of this group might appear differently several years hence. Second, it might be contended that the number of employees in the 0-3-year seniority group is so small that its age range might be faulty because of spotty or uneven distribution.

It is true that a heavier separation rate ordinarily occurs during the first few years of employment with a company; therefore, it may be expected that the "young" end of this seniority group will suffer a relatively high decimation rate within the next few years. Evidence which justifies this expectation is available in the fact that that part of this group which was hired under 21 years of age now constitutes about 25 per cent of the entire seniority group, whereas in no other seniority group is such a high percentage found. But the fact that wide age ranges still exist in other seniority groups even after this greater attrition rate has taken its toll shows that decimation is not likely to materially shorten the age range of a seniority group once it has been established.

That the hiring-age range of the 0-3-year seniority group differs considerably from the hiring-age range of other seniority groups is further confirmed by the fact that the average age-at-time-of-hiring of this group is decidedly lower than that of the other seniority groups. The average age-at-time-of-hiring for this group is about 24 years; for other groups it is in the low thirties.⁸

⁷ It is possible that the presence of seniority causes some individuals to begin its accumulation as early in life as possible.

⁸ This situation may be seen also by comparing the average age of the seniority groups (see Table 1). In both methods the results are about the same when either the arithmetic mean or the median is used.

Thus by either method of reasoning, it seems fairly certain that this seniority group will continue to exhibit its present age-at-time-of-hiring range and that the company has changed its hiring-age policy. Whether or not the company will benefit by this change in policy and the extent to which their decision may be partly the result of the seniority institution itself will be evident in a later section.

The effect of the labor market upon the caliber of applicants hired.—It long has been believed that the caliber of applicants hired at a given time—other things being equal—depends upon the degree of favorableness of the labor market at that time. It would seem that two principal factors determine the state of the labor market: first, the proportion of applicants which the company may find it necessary to accept in order to fill its needs; and, second, the variations in the quality of applicants caused by relative changes in the desirability of the wages, hours, and working conditions of the company. That there have been times when the labor market was unfavorable for either or both reasons was shown in the preceding section by fluctuations in age-at-time-of-hiring. In general, it may be assumed that a company always hires as advantageously as possible; that is, it strikes a balance between the number of employees it needs and the number of applicants seeking work with it.

If the body of data were large enough, the irregularities in the general trend line of efficiency within any given age group (that is, by seniority groups within an age group), or differences in trend along an age-at-time-of-hiring group, would be due to differences in the labor market. Since the body of data is too small to reveal the truth in this way, a modification will be used.

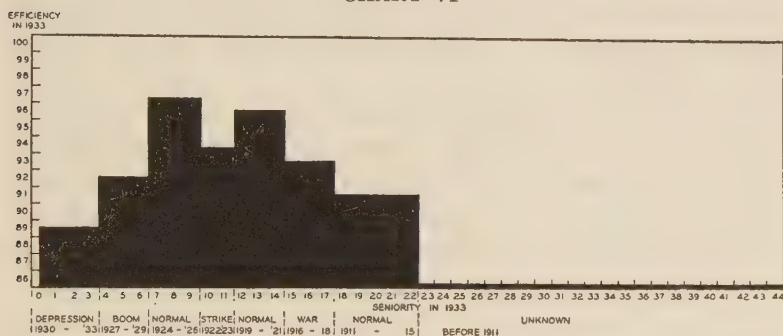
Chart V is best suited to show how the various seniority groups differ as to the proportion of each which lies within the area of above-average efficiency. This difference renders a comparison of the efficiency of one seniority group with another somewhat illogical; it follows, of course, that a comparison of the seniority groups on the basis of only that part of each which lies inside the area of above-average efficiency will be more revealing and accurate.

Chart VI shows unmistakably that the strike group is lower in efficiency than are the normal seniority groups on either side.

Since the war group is the last point on the curve, that is, it is the highest seniority group which passes through the area of above-average efficiency, it is not so clear whether or not the efficiency of this group is lower than it should be.

The results do not overemphasize the fact that the quality of employees hired during unfavorable labor market conditions is poorer than at other times, because no doubt there has been a

CHART VI



greater rate of discharge among the poorer employees, and thus part of the original difference has disappeared.

If the average age of the strike group were higher than that of either of the adjacent groups, some of the lowness could be attributed to age, but the fact is, as Table 2 shows, that the average age of this group is between that of the immediately adjacent groups. In other words, when these employees were hired, they had much the same age distribution as that of the strikers.

The effect of age and seniority upon efficiency.—The first step in the determination of the effects of age and seniority upon the efficiency of employees consists of finding a way to measure or describe the location of the area of above-average efficiency. Such a method will automatically smooth out the irregularities of its outline as pictured by any of the three methods of compartmenting.

The five-year moving averages in Chart III show that, up to a point, employees of higher ages are more efficient than those of lower ages and that above this point, employees of higher ages are less efficient than employees of lower ages. The area of above-average efficiency, as measured by age alone, extends from ages 29 to 45, inclusive. The fact that this measurement excludes several compartments which are above average in efficiency and includes several which are below is indicative that (1) age dimensions alone are not adequate to measure the area of above-average efficiency, (2) to attribute the change in an employee's efficiency to age alone, or to measure that change in age dimensions only, lacks precision, and (3) some factor other than age affects employee efficiency.

The efficiency averages by seniority groups in the same chart (III) show that, up to a point, employees of higher seniority are more efficient than are those of lower seniority and that, above this point, efficiency declines as seniority increases. The area of above-average efficiency as measured by seniority alone extends from 5 to 13 years, inclusive.⁹ The fact that this measurement excludes several compartments which are above average in efficiency and includes several which are below is indicative that (1) seniority dimensions alone are not adequate to measure the area of above-average efficiency, (2) to attribute the change in an employee's efficiency to seniority alone, or to measure that change

⁹ The 12-14 and 4-7 seniority groups each have an average efficiency of 92.2, but they are included since they lack only one-tenth of a point of being average, and since the change in efficiency is more abrupt or less smooth than 5-year moving averages. However, 5-year moving averages were not used to determine the above-average efficiency seniority range because the age range, density, and efficiency of the seniority groups are so distinct that it seemed illogical to violate these natural division lines. It will be noted also that the area of above-average efficiency as determined by all moving averages is considered from center to center of the end-groups. This is justified because if a 5-year group is just average and if there is a trend upward or downward—as there are in these averages—the 2 years on one side of the center year of any 5-year group are probably pulled up from below average to average by the 2 years on the other side of the center year. To be consistent, the above-average seniority range is considered as extending from center to center of the marginal seniority groups.

The 0-3 and 4-7 seniority groups have too few cases to justify separate compartmentation.

in seniority dimensions only, lacks precision, and (3) some factor other than seniority affects employee efficiency.

A combination of the two foregoing methods consists of the intersection of the above-average efficiency age-band and the above-average efficiency seniority-band. Their intersection forms a rectangle. Chart III shows that, although the rectangle fits the actual area of above-average efficiency more closely than does either the age or the seniority dimension, the fit is still far from satisfactory.

The weakness of the seniority dimension, the age dimension, or a combination of the two as a measure of the area of above-average efficiency can be brought into relief by describing the general nature of the age and seniority combinations of the compartments which lie inside and outside of the area. There are four possible combinations of age and seniority which involve one or both factors in extreme amounts: (1) high seniority and high age; (2) low seniority and low age; (3) high seniority and low age; and (4) low seniority and high age. All compartments of the first two categories fall outside of the area of above-average efficiency as determined by any of the three methods of compartmentation. The third type is impossible because a man cannot be young and have acquired high seniority. And the fourth combination does not exist—although it is possible—because companies do not hire old men. The area of above-average efficiency contains no compartment which is marked by extremely high or low seniority or age.

The five-year moving averages of the cross-diagonals in Chart IV measure directly the changes in efficiency along the working-life paths of the employees. That the diagonals which intersect the base line between ages 32 and 33 and between 60 and 61 fit the area of above-average efficiency is evident. It can be seen that they would also fit the area of above-average efficiency as determined by the methods of compartmentation used in Charts III and IV. These diagonals include very little which is below average and exclude no compartments which are above average. There is no doubt that curved lines would fit better, but, where the curvature of such lines would be the sharpest, the data are scarce or

lacking; for example, a great deal of empty space is included at the lower right corner of the area. But since applicants old enough to fall in this area are no longer hired, no harm is done by the inclusion of such empty space.

This method of describing the area of above-average efficiency is highly significant because it discloses a relationship between seniority and efficiency—the causal nature of which will become apparent later. The most frequent combinations of age and seniority which are held by employees who are average or higher in efficiency are those which total between 33 and 60, inclusive. For example, a 47-year-old employee with 10 years of seniority—the total of which is 57—will fall in the area of above-average efficiency, and the average of the efficiencies of such individuals is above the average for the whole employee body; therefore, typically an employee of this combination of age and seniority will be above average in efficiency. On the other hand, an employee of this same age but having 20 years of seniority will fall outside the area and typically will be less than average in efficiency.

The second step in determining the effect of age and seniority upon employee efficiency is a description of what would be the shape of the area of above-average efficiency if seniority were not present or if it had no effect. If age were the only factor which affected the efficiency of employees, the area of above-average efficiency would be bounded by straight lines parallel to the line at which men begin their working lines and to the line at which they retire. In other words, after an average length of time men become average in efficiency. After another period of years a maximum efficiency age would be reached; another period of years would reduce their efficiency to average again. And finally they would reach an average retirement age and the below-average efficiency which goes with it. This is a generalization of how age alone would affect a man's efficiency; the position of the lines or ages would vary, of course, for various types of work—manual labor, skilled labor, etc., and for different individuals. Thus it may be seen that if seniority did not affect efficiency the hill of data would look like a barn roof—that is, the highest part of the

roof would be a horizontal ridge. To complete the analogy, the age or base line in the charts is the diagonal across the parallelogram of working lives of the employees and marks the point in the life of each at which he entered the service of this particular company.

The fact that the area of above-average efficiency is not bounded on the left and right by straight lines is indicative that (1) the hill of data is not ridged but peaked or cone shaped, and, therefore, the lines curve in order to hug the hill at its average height or contour; (2) within a given age, the height or efficiency is lower at its low and high seniority ends than in between; and, therefore, (3) some influence other than age is postponing or adding to, as the case may be, the effect of age on efficiency.¹⁰ Confirmation of these points by the data will follow.

It is assumed that after the effect of past differences in the labor market have been smoothed out and that since seniority has greatly reduced favoritism, the only major remaining factor which could directly or indirectly affect the efficiency of employees in a cumulative manner is seniority. However, it might at first seem that, since an employee can neither get a year older without accruing an additional year of seniority nor accrue an additional year of seniority without getting a year older, the effect of seniority is merely the reflection of the effect of age. Tables 1 and 2 show this relationship more realistically. Each higher age group has a higher average seniority, and the average age for each succeeding seniority group is likewise greater.

The relationship between age and seniority does not, however, prevent seniority from being a separate factor affecting employee efficiency, as the following discussion will show. If the body of data were large enough, the fact that both age and seniority affect the efficiency of employees could be proved conclusively by the simple expedient of noting the change in efficiency in each single-year age group throughout its length—seniority range. And also the effect of age could be isolated by taking each single year of

¹⁰ The entire case could be stated starting with horizontal seniority lines as bounding the area of above-average efficiency as the fundamental assumption, but the end-result would be the same.

seniority and noting the changes in efficiency along its length or age range. In view of the relatively small size of the present body of data, this can be done only for one or two age groups and for one or two seniority groups, and even then only by combining five years in each group. But Tables 3 and 4 definitely establish the principle that seniority and age are separate factors and that each has its own effect upon employee efficiency. In other words,

TABLE 1
AVERAGE SENIORITY OF THE EMPLOYEES
BY AGE GROUPS

Age Groups	Average Seniority	Age Groups	Average Seniority
Under 25.....	1.5	45-49.....	13.0
25-29.....	5.5	50-54.....	14.0
30-34.....	9.0	55-59.....	17.0
35-39.....	11.0	60-64.....	19.0
40-44.....	12.0	Over 64.....	12.0*

*This group contained only three cases.

TABLE 2
AVERAGE AGE OF THE EMPLOYEES
BY SENIORITY GROUPS

Seniority Groups	Average Age	Seniority Groups	Average Age
Under 4.....	28.0	12-14.....	45.0
4-6.....	38.5	15-17.....	47.0
7-9.....	38.5	18-22.....	50.0
10-11.....	43.0	Over 22.....	55.0

in one instance age is held constant, and in the other seniority is held constant.

The third and final step in determining the effect of seniority and age upon efficiency consists in examining the data to see whether or not some abnormality of age or seniority distribution or some chance circumstance might have caused the area of above-average efficiency to just happen to have its present shape. Several tests can be used to show that the area of above-average effi-

ciency is not just an accident and, also, that no mere change in seniority distribution would alter significantly its size, shape, or location.

As mentioned before, the body of employees has been hired in bunches, and consequently the number of employees in each

TABLE 3
RELATIONSHIP BETWEEN AGE AND EFFICIENCY
WITH SENIORITY HELD CONSTANT

AGE	EFFICIENCY*		AGE	EFFICIENCY*	
	0-3 Years' Seniority	15-17 Years' Seniority		0-3 Years' Seniority	15-17 Years' Seniority
22.....	91	.....	43.....	91	92
23.....	92	.....	44.....	85	90
24.....	90	.....	45.....	80	88
25.....	90	.....	46.....	.....	88
26.....	90	.....	47.....	.....	88
27.....	90	.....	48.....	.....	88
28.....	92	.....	49.....	.....	90
29.....	92	.....	50.....	.....	91
30.....	93	.....	51.....	.....	90
31.....	95	.....	52.....	.....	91
32.....	95	.....	53.....	.....	91
33.....	96	.....	54.....	.....	88
34.....	94	.....	55.....	.....	86
35.....	92	.....	56.....	.....	86
36.....	89	92	57.....	.....	84
37.....	92	92			
38.....	94	93			
39.....	94	93			
40.....	90	94			
41.....	89	94			
42.....	89	93			

*Seven-year moving averages, centered, show the first average at the fourth observation, and, therefore, three observations are cut off each end.

†Above-average efficiency range.

seniority year varies widely. The strike of 1922-23 was particularly disrupting to the seniority distribution: it thinned the ranks of those who in 1933 would have had over 11 years of seniority, and, therefore, at the same time caused the number of employees in the 10-11-year seniority group to be abnormally large. It was shown in the preceding section that the efficiency of this group is lower than it ought to be. But if its efficiency were normal, it

would be so by reason of a smaller number in this group. However, this would mean a larger number in the higher seniority ranks. And since employees who have high seniority are relatively inefficient, the higher efficiency of a smaller number in the 10-11-year seniority group would be more or less offset by the deflating power of a larger number in the upper and relatively inefficient seniority ranks. Thus the average efficiency is not much different

TABLE 4
RELATIONSHIP BETWEEN SENIORITY AND EFFICIENCY
WITH AGE HELD CONSTANT

SENIORITY	EFFICIENCY*		SENIORITY	EFFICIENCY*	
	35-39 Years' Age	45-49 Years' Age		35-39 Years' Age	45-49 Years' Age
3.....	91	.....	15.....	91	86
4.....	92	.....	16.....	90	89
5.....	91	.....	17.....	89	89.5
6.....	93	93	18.....	90	88
7.....	94	94	19.....	89	89
8.....	94	93			
9.....	95	94			
10.....	94	94			
11.....	95	93			
12.....	94	91			
13.....	94	90			
14.....	93	88			

*Seven-year moving averages, centered, show the first average at the fourth observation, and, therefore, three observations are cut off each end.

†Above-average efficiency range.

from what it would be if the seniority distribution were normal. Furthermore, the company hired so many men at the time of the strike that their age distribution must have been about the same as that of the strikers.

The fact that the 10-11-year seniority group is lower in efficiency than it ought to be can be visualized by thinking of a fault line running across a hill. Such a fault line is visible as a sunken path. But its presence does not alter the general outlines of the base contour, the contour at the average height, or the top of the hill.

Unless one is willing to believe that the caliber of those who did not go out on strike and those who saved their seniority by returning before the expiration of the dead line for returning without loss of seniority was lower than that of those who lost their seniority, the average efficiency in the various compartments above the 11-year seniority line would not be different if the seniority distribution were normal—because the average efficiency in a given compartment would be approximately the same whether it were composed of 25 or 75 observations. And, furthermore, since the average of the 10-11-year seniority group is lower than it would be under conditions of normal seniority distribution, it would be hard to believe that the efficiency of the higher seniority groups is also lower than it would be under conditions of normal seniority distribution.

However, this is not to say that the area of above-average efficiency could not be changed. Instead, it is to say that under a given seniority system, and with other conditions of work and opportunity also remaining the same, aberrations in the age and seniority distribution will smooth out and leave the area of above-average efficiency unchanged in general size, shape, and location. Especially is this true in view of the fact that the efficiency of an individual or a compartment is measured against the average efficiency of the whole employee body. Any material change in the size, shape, or location of the area could result only from either a decrease or an increase in the efforts to lessen the effects of age or seniority upon the efficiency of the whole body of employees. This is not an impossibility, but rather a matter of maintaining a balance between a man's changing ability and the job he holds. In fact, the lines bounding the area of above-average efficiency could be made to flare outward throughout the seniority range. Further discussion of this subject will have to be deferred to a later portion of the study.

Effect of age-at-time-of-hiring upon employee efficiency.—In a preceding section it was shown that the age and seniority distribution of the employee body was initially influenced by the company's policy in regard to the hiring-age range. This policy could,

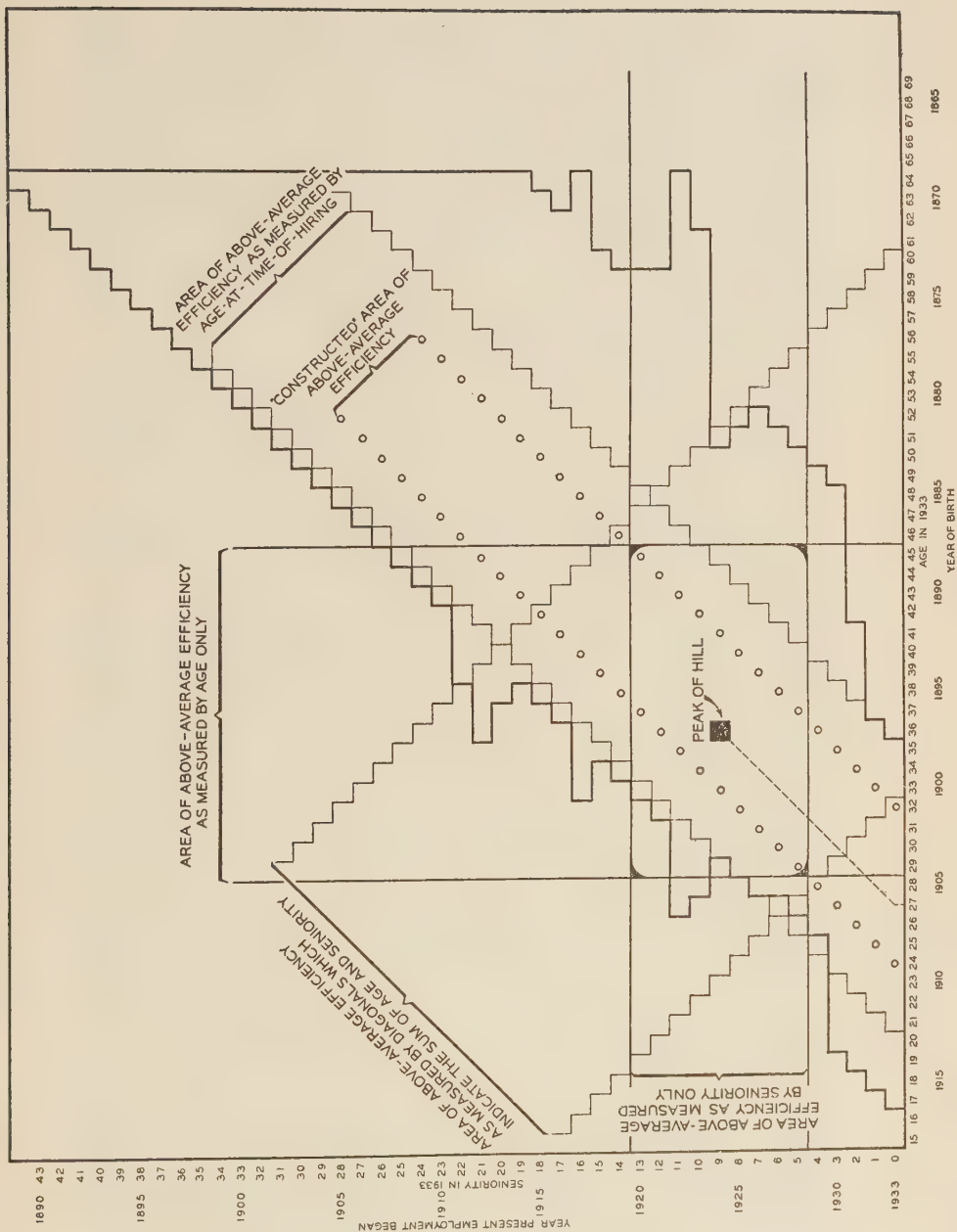
therefore, be said to be indirectly responsible for the effects of age and seniority upon efficiency.

It is essential to bear in mind that the foregoing section merely measures the area of above-average efficiency. The age dimension of this area does not constitute a satisfactory hiring-age range. The first step in determining a satisfactory hiring-age range from the size, shape, and location of the area of above-average efficiency is to translate its age and seniority dimensions into age-at-time-of-hiring terms.

The necessity of choosing the hiring-age range so as to include the peak of efficiency of the individuals is vastly increased when seniority exists, because of the greater likelihood of an employee staying until retirement age and because the top of the hill is a peak instead of a ridge. Theoretically, there is only one age-at-time-of-hiring and the resultant working-life path which will pass through the peak of the hill. In other words, in a hill having a peak, the longest horizontal distance through the hill at its average height will pass directly beneath the peak; and this greatest distance is essential because, if an employer must keep a man all of his remaining working life, he should hire him not only at such an age that he will contribute the best years of his life to the company but also at that age which will allow the employee to reach as high a state of efficiency as possible under the seniority system.

In Chart V may be seen the intersection of the most efficient seniority group, the most efficient age group, the most efficient age-at-time-of-hiring group, and the most efficient cross-diagonal group. The center of the area formed by their intersection may be described as age 36, seniority 9, and age-at-time-of-hiring 27. These groups intersect at a common area rather than cross one another at different places, because the hill near the peak is fairly smooth and nearly symmetrical. This common area is a "constructed" or weighted average peak; and while it may be slightly removed from the actual peak, the former concept is more valuable.

Since a single-year hiring-age range probably would seldom be wide enough to fill the employer's needs, it is desirable to deter-



mine what hiring-age range would be just wide enough to obtain a group of employees who would match those of the present group who now are above average in efficiency. Three methods are used here for determining this range.

The first consists of determining 5-year moving averages of the data on the basis of age-at-time-of-hiring. Chart IV shows these averages. As shown in Chart VII, the area of above-average efficiency as measured in these terms consists of those who were hired at ages 21-35, inclusive. In other words, this is the most satisfactory 15-year hiring-age range.

The second method consists of subtracting the above-average efficiency range, as determined by seniority only, from the above-average efficiency range as determined by age only; that is, 5-13 (seniority) subtracted from 29-45 (age) shows that 24-32 is the most satisfactory 9-year hiring-age range.

The third method consists of translating the area of above-average efficiency as measured by the cross-diagonals—which indicate the sum of age and seniority—into a hiring-age range. This is done by noting where the cross-diagonals intersect the above-average efficiency area as measured by age only and also as measured by seniority only. It will be noted that these intersections are slightly removed from the corners of the rectangle formed by the intersection of above-average efficiency area as determined by seniority dimensions only and age dimensions only. Therefore, it is necessary to average the intersections. For example, the upper cross-diagonal intersects the right-hand side of the area of above-average efficiency as determined by age only at seniority 15, age 45, and the area of above-average efficiency as determined by seniority only at seniority 13, age 47. The average of these two intersections is seniority 14, age 46. Subtracting seniority 14 from age 46 indicates the upper hiring-age limit as being 32. By the same process the lower hiring age limit is found to be 24. This method yields the same results as the second method; that is, ages 24-32 constitute the best 9-year hiring-age range. It will be seen that, if it is necessary to depart from the single-year hiring-age range of 27, the widening should proceed more rapidly toward the higher ages than toward the lower ages.

SUMMARY AND CONCLUSIONS

This article may be summarized under four major points:¹¹ (1) seniority is a separate force which is directly and cumulatively deleterious to the efficiency of employees; (2) it perpetuates and accentuates the evil effects of other factors which affect the efficiency of employees; (3) as a general rule, an employee is above the average efficiency of the whole group if his seniority and age together total between 33 and 60, inclusive; and (4) the direct and indirect effects of seniority greatly enhance the importance of employee selection. As a part of the latter, the presence of seniority makes it necessary to narrow the hiring-age range much more severely than would otherwise be necessary.

Seniority as a separate and cumulative factor directly deleterious to employee efficiency.—By the device of holding age constant it was shown that seniority affects efficiency. For example, in the 35-39-year age group, the most efficient employees are those who have 11 years of seniority. From this peak the efficiency gradually decreases toward those having more and less seniority. Within this age group, the seniority range of those who are above the average efficiency of the whole employee body is 6-14 years, inclusive.

It must not be concluded from the preceding paragraph that for the first 11 years efficiency improves because of seniority; instead, it improves in spite of it. That the peak in this age group is held by those who have 11 years of seniority rather than a lesser amount is due to the fact that this age group is approximately the most efficient age group. In a less efficient age group the peak would be at a lower amount of seniority. The reasons why seniority directly affects efficiency will be taken up in a later article; the purpose here is only to show something of the extent to which the efficiency of employees is decreased by the presence of the seniority working condition.

¹¹ It seems unlikely that a similar study in another branch of the railroad service on the same or a different railroad—or even in another industry having comparable seniority rules—would yield evidence which would substantiate conclusions radically different from those of this study. Seniority is always desired for the same general reasons; the rules for its operation are similar; and, therefore, the results should follow the same general pattern.

The indirect effect of seniority upon employee efficiency.—For purposes of analysis it was necessary to study separately each of the factors which affect the efficiency of employees: age, age-at-time-of-hiring, the state of the labor market, and seniority. However, it is of great importance to note that seniority accentuates and perpetuates the effects of the other factors which affect employee efficiency.

The harmful effects of seniority upon employee efficiency begin with the extent to which its presence in the employee working conditions alters the attractiveness of employment with the company. Although the data in this study are not of a character to offer any evidence on this point, it seems quite possible that the installation of the seniority method of determining the rate of success-progress of employees would not operate to attract a higher quality or more ambitious group of applicants—unless one assumes that applicants have no understanding of seniority, that employment opportunities in nonseniority industries do not exist, or that working conditions in the company are already so inferior as to stifle all ambition.

Consider, second, how the presence of seniority increases the difficulty of rectifying mistakes in hiring. Employees are reluctant to lose their seniority. Consequently, they are less willing to transfer to work which more nearly matches their ability. It operates to increase the average age of the working force in spite of any and all effort to offset the tendency by altering the hiring-age range. As employees grow old, little can be done to place them at work more nearly within their ability. Whatever mistakes a company makes in hiring can be rectified only with increasing difficulty: the employee status cannot be terminated by layoff or furlough. If a company is forced to hire a great number of employees during a relatively short period of time (such as the present), whatever surplus remains when normal conditions return will constitute his only source of employees for many years afterward—he cannot hire applicants until all furloughed employees have been recalled in seniority order. Seniority preference means that seniority increasingly becomes the criterion of ability

or deservedness for promotion, displacement ("bumping"), and vacancy filling. It even makes discharge for cause more difficult, simply because it greatly—though artificially—increases the severity of discharge. It might seem that this fact should cause employees to avoid committing dischargeable offenses. Probably it does to some extent, but the situation becomes somewhat similar to an excessive penalty for a crime: the jury less frequently finds the defendant guilty.

The extent to which age and seniority indicate employee efficiency.—It was shown in the charts that neither the age nor the seniority dimension alone is sufficient to measure or locate the area of above-average efficiency and that, therefore, neither concept is a measure of merit. For example, both the above-average efficiency seniority-band and the above-average efficiency age-band not only include part of the body of data which lies outside the area of above-average efficiency but also exclude part of this area. Since both age and seniority affect efficiency, it is logical that some combination of age and seniority dimensions is necessary to locate the area of above average efficiency—or to indicate those employees who, more likely than not, are above average in efficiency. It was found that this area is best measured by the sum of age and seniority. An employee whose age and seniority combined total between 33 and 60, inclusive, will fall in the area of above-average efficiency and, therefore, more often than not will be as good or better than the average for all employees. Of course, exceptions will always occur; in the final analysis, the only measure of merit is performance.

The increased importance of employee selection under a seniority system.—And finally, the presence of seniority makes it necessary for the employer to narrow the hiring-age range. It will be recalled from an earlier discussion of this point that the effect of seniority and age together cause the efficiency hill to be peaked, whereas, if age only affected seniority, the high part of the hill would be a ridge—like the ridge of a barn roof. This situation makes it necessary for the employer to narrow the age range of hiring so that the working-life paths of the employees will pass through that

peak. Age 27, or very close thereto, satisfies this condition. Those hired at other ages will not achieve as high a degree of efficiency. This is made doubly important owing to the fact that the presence of seniority increases the likelihood that the employee will stay with the company the rest of his working-life; that is, since the presence of seniority greatly increases the probability that an employee will remain with the company during his declining years, it is the more important that the company have his services during his prime.

In conclusion, the only defense—and that only a partial one—against the evils of the seniority system, is more careful selection and placement of applicants and the selection from within as narrow a hiring-age range as circumstances will permit.

[To be continued]

DAN H. MATER

EFFECTS OF SENIORITY UPON THE WELFARE OF THE EMPLOYEE, THE EMPLOYER AND SOCIETY¹

DAN H. MATER²

THE evaluation of seniority in this article will proceed from the points of view of the welfare of each of three groups: the employees, the employers, and society in general—the railroad seniority system serving as a case study.³

SENIORITY AND THE EMPLOYEE

During several years of railroad experience the author shared the feelings of the typical railroad employee toward seniority. This attitude, as probably is the case with most employees, was gained more by a process of absorption of the general opinion of fellow-workers than by independent thinking. And it is extremely important to note that, although employees more or less continually express their opinions concerning specific instances of application and interpretation of seniority, they rarely discuss its validity as a method of job allocation.

Conceptions and misconceptions of the employees concerning seniority.—The employee is thoroughly convinced that, as developed and maintained by the unions, the seniority system of job alloca-

¹ This is the concluding article in a series of four, which has appeared in this *Journal* on the general subject of the railroad seniority system. The titles of these articles and dates of publication are: "Seniority Rights before the Courts," April, 1939; "The Development and Operation of the Railroad Seniority System," October, 1940, and January, 1941; and "A Statistical Study of the Effect of Seniority upon Employee Efficiency," April, 1941.

² Graduate student in the School of Business, the University of Chicago.

³ For conclusions considerably at variance with those of this study see *Seniority Rules of the National Agreement* (a pamphlet of thirty-three pages prepared by the Bureau of Research of the Railway Employees' Department, American Federation of Labor, presented by W. Jett Lauck in behalf of B. M. Jewell before the U.S. Railroad Labor Board, presumably in 1920) for a statement of claims and evidence of the value of seniority to the employees, employers, and society.

tion is highly effective in protecting him from direct discrimination if he is middle aged or older, if he belongs to a union, or if he is the object of some official's disfavor. He also realizes the indirect harm which he would suffer if the seniority system did not prevent other employees from receiving preferred treatment in matters of job allocation. In other words, he is quite aware of the fact not only that the seniority system protects him from the caprices of the employer but also that this protection may be viewed as against those employees who, if anything were to be gained thereby, would court the favor of officials in a multitude of servile ways.

On the other hand, he typically misconstrues the impersonality of seniority, that is, since favoritism and discrimination in job allocation are largely mitigated thereby, he is led to believe that, *ipso facto*, it is a fair and accurate measure of deservingness. The idea that an employee who is more capable than another should be given the slightest preference over one who can "just get by" is somewhat foreign to his thinking.

Divisions of interest among the employees.—A fundamental error which is continually made is that of considering the welfare of employees as being homogenous. Pushed to the extreme, there are as many divisions of interest among the employees as there are employees. Concerning the single factor of seniority alone, there are several divisions of major importance. Determining the monthly mileage which train and engine crews should be allowed to make before the number of "chain gang" crews should be increased or decreased is a perennial problem. Should a telegrapher, for example, whose position has been abolished be permitted to "bump" any junior man on the roster, a junior man in the same office, or the junior regularly assigned telegrapher on the seniority list? A three-cornered dispute which arises, especially during depressions, has to do with the length of time a man should be on the inactive extra list before being dropped from the seniority roster. In this connection it should be recognized that seniority is the very antithesis of the "share the work" philosophy.

The foregoing examples and many others amply attest that there is a fundamental conflict of interest between the senior men

and the junior men.⁴ Of course, there is no certain number of years of service or percentage of the employees which distinguishes an individual's junior or senior status. The term is a relative or fluid one. The senior men, in general, want a very strict interpretation of seniority; whereas, the junior men—until they become seniors—want a more liberal application of the principle.

During one's early seniority years he usually is in the minority; this means that the rules which the union bargains for are in the interests of his seniors. However, it is perfectly possible for a given individual to remain in the minority even after he has become a senior and, therefore, to be partially deprived of the fruits of his seniority.⁵ This kind of a situation can come about by reason of a sudden increase in the number of jobs in a given seniority district, an unbalanced age or seniority distribution of the employee group, or a serious depression and consequent deep-cutting layoffs. As an example of the latter,⁶ ninety consecutive days of unemployment formerly was the standard time after the passing of which a man's seniority date was canceled. However, when the layoffs resulting from the depression of 1929 began to bite deeply into the ranks, the number of employees who were adversely affected by this ninety-day clause automatically increased until at length they were able to insist that the union bargain for an extension or cancellation of this period.

⁴ G. Meredith Rountree, *The Railway Worker* (Toronto, Ont.: Oxford University Press, 1936), pp. 29-30; also Frederick H. Harbison, *Seniority Policies and Procedures as Developed through Collective Bargaining* (Princeton, N.J.: Industrial Relations Section, Department of Economics and Social Institutions of Princeton University, 1941), p. 54. Sumner H. Slichter in his excellent volume, *Union Policies and Industrial Management* (Washington: Brookings Institution, 1941), makes many references to seniority. On the present point he speaks as follows: "Perhaps the most serious drawback to the seniority rule from the standpoint of unions is its tendency to create dissension within union ranks" (p. 156). Thomas A. Knowlton makes frequent references to this point in *Railroad Labor Organization and the Contraction of Job Opportunities* (unpublished Ph.D. dissertation, University of Wisconsin, 1940); see particularly pp. 127, 139, 142, 147, 157, 158.

⁵ On the other hand, for a given employee to be among the majority both when he is a junior and when he is a senior could scarcely happen.

⁶ From 1925 to 1929 the rate of separations by furlough was approximately 1.5 per cent. From 1930 to 1933 this rate had increased to approximately 7.5 per cent. See J. B. Eastman, *Employment Attrition in the Railroad Industry* (Washington: Government Printing Office, 1935), pp. 48-49, Tables 2 and 3.

There is another division of interest which, though it is largely unrecognized by the employees, nevertheless vitally and differentially affects their welfare. Roughly stated, this division is between the employees of above-average ability and the employees of below-average ability—interpreting ability here to include, among other things, ambition as determined by willingness to accept responsibility.

The rising seniority cost of job security.—To most persons security has come to mean the assurance that they will be able to go on living at something near their present standard of living without experiencing any unpleasant changes in the manner of obtaining it and in spite of any decline in the market for or quality of their ability. Middle-aged and older employees, particularly, fear being “eased out” of employment in favor of younger men.

Seniority is an incentive for an employee to remain with a given firm. The unions are correct when they affirm that, by reason of the seniority system, the longer a man stays with a company, the less likely he is to quit. Thus, even though no other influences were at work, average tenure and, therefore, average age would gradually increase following the installation of a seniority system. The presence of such a system, however, through the operation of the layoff and recall provisions, causes the unemployment resulting from all sources to be concentrated among the junior employees.⁷ Thus, the upward movement of average age and average seniority is greatly accelerated. The number of railroad employees in this country decreased from two million in 1920 to one million in 1933.⁸ The total direct and indirect effects of seniority upon average tenure and average age accompanying this decline in railroad employment for the country as a whole is not known.⁹

⁷ Those laid off age just as rapidly and accumulate seniority just as rapidly as those who are actually working.

⁸ Since 1933 the number of employees has fluctuated around the million mark.

⁹ The average length of service of all railroad employees, as determined by a special study of seven railroads, doubled between 1925 and 1933 (see J. B. Eastman, federal co-ordinator of transportation, *Annual Earnings of Railroad Employees, 1924-1933* [Washington: Government Printing Office, May, 1935], p. 17). See also p. 395, n. 24, of this article for changes in age distribution among railroad employees throughout the country.

Table 1 and Charts I and IV, however, show a year-by-year decline in the number of employees in the operating department of a large railroad, together with the changes in average age and average seniority.

During the twenty-year period from 1920 to 1939, inclusive, the number of employees in the study¹⁰ declined at an average

TABLE 1

THE EFFECT OF SENIORITY UPON AVERAGE AGE AND AVERAGE SENIORITY
WHEN THE SIZE OF THE WORKING FORCE IS REDUCED

Date	No. of Employees in a 2 Per Cent Sample	Average Age*	Average Senior- ity*	Date	No. of Employees in a 2 Per Cent Sample	Average Age*	Average Senior- ity*
1920.....	381	32	7	1930.....	265	42	18
1921.....	317	34	9	1931.....	256	43	19
1922.....	315	35	10	1932.....	247	44	20
1923.....	322	36	10	1933.....	235	45	21
1924.....	302	37	12	1934.....	229	46.5	22
1925.....	306	38	13	1935.....	225	46	23
1926.....	303	39	14	1936.....	226	48	24
1927.....	294	40	15	1937.....	221	49	25
1928.....	286	40	16	1938.....	209	49	24
1929.....	285	41	17	1939.....	203	50	26

* All averages are medians or mid-observations.

rate of approximately three and one-half employees per hundred per year. During this time the average age was forced upward by

¹⁰ The number of employees in the operating department of a certain large railroad, their total seniority, and their total age for January 1, 1939, was calculated from a 2 per cent sample of the "live" file. In order to obtain similar data for January 1, 1938, the number of employees who were hired in 1938, their total seniority, and their total age as determined by a 2 per cent sample of the "dead" file were subtracted from the respective totals for January 1, 1939; and to these figures were added the number of employees, their total age, and their total seniority of those who had left the company during 1938. The data for each of the other years were obtained by a continuation of this process.

Since some criticism of the merit system of this company is inherent in the study, it seems better not to offer further identification. It may be stated, however, that the data are from a different railroad company than were those on which the preceding article was based. Probably the results would have been slightly different if the sample had represented all employees rather than just those in the operating department. However, it is believed that the results would not have differed in principle or direction. It seems improbable also that, had the sample represented all railroads, the results would have differed materially.

the seniority system, both directly and indirectly, from approximately thirty-five years to fifty-one years—based upon a smoothed curve of the age data. This is slightly less than one year every year. In the same manner the average seniority increased—based upon a smoothed curve of the seniority data—from approximately eight years to twenty-seven years, or slightly more than one year every year.

If the identity of a working force remained the same, the average age and the average seniority of the employees would increase exactly one year every year—without any advantage accruing to anyone. Obviously, in a decreasing working force under conditions of seniority the average age and the average seniority would increase more rapidly than one year every year. The reason that the data do not show this greater rate of acceleration is explained by the fact that employees are added and/or dropped every year, and it so happens that the opposite influences which these two factors would have upon the average age and the average seniority have approximately offset each other.

Countless employees, after they have accumulated the amount of seniority which when they entered their employment relationship appeared to be ample to insure steady work at a good job, have been dismayed to see that that amount no longer was sufficient.¹¹ The situation is much the same as that in which a man, after working and saving throughout his lifetime for his old age, finds that inflation has robbed him of a great deal of the value of his savings.

The incidence of the cost of seniority.—Increasing average tenure not only increases the price of security but also reduces the rate of advancement toward better jobs.¹² Other factors remaining constant, progress in obtaining better jobs is controlled by the rate of labor turnover. As average tenure rises, the progress of an ever increasing percentage of the employees will be slowed to a

¹¹ See "A Railroad Fireman," *Fortune*, XIX, No. 6 (June, 1939), 78-84.

¹² A brakeman, in all seriousness, is supposed to have advanced the idea that, since one needs so many "whiskers" in order to get a regular job, the rate of pay should be raised. Slichter (*op. cit.*, p. 162) believes that, especially in establishments which do not pay by the piece, wage rates are held down by forcing the employer to retain older men.

rate less than that which they could achieve if uninhibited by seniority—the more able the employee, the greater his sacrifice. Those who would be willing and able to progress faster than the rate of labor turnover will permit are the losers.¹³ In a train, cars with weak drawbars can be “set out” until repaired. Conditions of decreasing employment in the seniority district accentuate the rise in the cost of security and the decrease in the rate of opportunity. The abolishment of a single position may prevent dozens of employees from improving their lot—the value of their seniority is thereby automatically decreased.

The extent to which seniority enables older workers to hold their jobs longer than they would in the absence of seniority is made possible only by reducing the opportunity of younger employees. Or, to look at the situation from a longer-run point of view, part of the price of old age job security to the employee who has been fortunate enough to obtain it was paid by himself in accepting poorer jobs and withstanding unemployment during his youth. The remainder was paid by other workers by reason of the fact that they had paid all or part of the price of their own old age job security but failed to reap the benefit thereof. It should be evident that the employer does not pay a cent to the employees themselves for their loyalty of long service.

It is often claimed that seniority places the burden of unemployment on the shoulders of those most able to bear it—namely, the younger men. Within very narrow limits this probably is true. For example, a lad of twenty years of age is less likely to be married and to have children than is an older employee. On the other hand, the inability to have achieved any degree of security through seniority at any age under thirty unquestionably must often defer marriage and postpone the siring of children. At the other end of the age scale, men of fifty or more years of age at least have had greater opportunity to have accumulated a finan-

¹³ Of course, a man can be promoted out of the ranks or called to the union's service because of exceptional performance; or in plain cases of inability or unwillingness an employee can be discharged.

cial reserve and to have finished their task of rearing children.¹⁴ Thus they might well, on the average, be more able to bear unemployment than younger men. In the middle years what possible relationship could there be between a man's needs and his seniority? Who would care to say that men of fifteen years of seniority are more needy than men of fourteen years of seniority?

By the time an employee reaches security in a long-established seniority system he is no longer young, and whatever truth may once have existed in the claim that the junior employees are more able to bear the burden of unemployment has become an absurdity.¹⁵ It is doubtful if there ever was a high relationship between need and seniority, but, even though a fair correlation of this nature existed now or in the past, it is an unsound method of determining need. Granted that need should be considered in determining who is to withstand the unemployment, it is a secondary principle and must be specifically considered in each and every case: need is an individual and special condition, and differences therein are so highly important that they must not be

¹⁴ Carter Goodrich, *Earnings and Standard of Living of 1,000 Railway Employees during the Depression* (Washington: U.S. Department of Labor, Government Printing Office, 1934), p. 8. See also an article by F. W. Cottrell in *Personnel Journal*, "The Seniority Curse . . .," XVIII (November, 1939), 177-83.

¹⁵ In *Annual Earnings of Railroad Employees, 1924-1933*, p. 3, Co-ordinator Eastman writes as follows: "Annual earnings decreased on the average by about one-fourth between 1929 and 1933. Unemployment was an even greater factor than wage cuts in producing this decline, and the burden of the depression was so unevenly distributed that those who could least afford reduction in their wage incomes endured the greatest wage losses. It should be borne in mind that the data in this report represent earnings of railroad employees during the period of their attachment to the industry. The figures themselves reveal nothing of the plight of the hundreds of thousands who were more or less permanently separated from railroad service during the years since 1929." Translated into terms of money income: "In 1929 employees with 30 years of service and over averaged about 30 percent greater earnings than those with from 5 to 9 years of service. In 1933 employees with 30 years of service and over earned 129 percent more than those with 5 to 9 years of service."

It is this circumstance which prompts George M. Harrison to suggest unemployment reserves for only those employees who have insufficient seniority to insure steady work (see "Unemployment Reserves for the Railway Industry," *American Labor Legislation Review*, March, 1933, p. 26).

determined on the basis of the rough generalization that the less seniority a man has, the less he has need of employment. The "right to the job" applies to all men, on the basis of carefully determined merit and need.

The serious nature of the loss of seniority.—Strikes offer an excellent illustration of the havoc which an unforeseen event can wreak upon the security of individuals when that security is based upon seniority. The first thing that a company does when a strike is called is to threaten the strikers with seniority cancellation unless they return to work within a given time.¹⁶ Not only does the

¹⁶ In 1919 a strike occurred on the Pacific Electric Railroad; the company obtained an injunction; the switchmen and some of the trainmen refused to handle the interchange; the union officials were unable to get the men to return to work promptly; and, finally Director-General McAdoo issued a proclamation which read, in part, as follows: "... All striking employees who do not report for duty on Saturday morning, August 30 when and as called for duty, will be regarded as having terminated their employment and their places will be filled" (Walker D. Hines, *War History of American Railroads* [New Haven, Conn.: Yale University Press, 1928], p. 184).

The yardmen in the Chicago area went out in an unauthorized strike in 1920, and the strike spread to the trainmen on many of the railroads leading into Chicago. The railroads set a deadline for employees to return to work without loss of seniority. And President Lee of the Brotherhood of Railroad Trainmen issued an edict to the effect that failure to return to work would result in loss of seniority rights as well as expulsion from the Brotherhood. Ninety-two charters were canceled, and thousands of employees lost their seniority (see O. D. Boyle, *History of Railroad Strikes* [Washington: Brotherhood Publishing Co., 1935], p. 100; and Walter F. McCaleb, *Brotherhood of Railroad Trainmen* [New York: Albert & Charles Boni, 1936], p. 103).

The seniority question greatly prolonged the disastrous nation-wide strike of the railroad shopmen in 1922. In fact, on many railroads an agreement never was reached, and even under terms of the so-called Baltimore Agreement, many thousands of employees resumed their jobs—but as new men. Even at the time everyone admitted that the question of whether or not the employees should return sans seniority evolved as the most serious one under consideration. The managements contended in their telegrams to the president that the men had themselves terminated their seniority by leaving their jobs and, furthermore, that they could not cancel the seniority of those who had taken the places of the strikers. In general, they were supported by the Railroad Labor Board in its so-called "outlaw resolution." The unions in their telegrams to the president, relative to acceptance of the latter's plan of settlement, fought for the return of the striking employees without loss of seniority. The following is quoted from one of their telegrams as representing their attitude: "It would certainly be a wholesale injustice of unparalleled extent, if hundreds of thousands of experienced men who have given four to forty years' service, and whose value to the transportation industry is proportionate to the length of their

presence of seniority constitute an incentive to some men not to go out on strike,¹⁷ but it is an additional incentive to many individuals to come in as strikebreakers. As an illustration, suppose that all but five men go out on strike, that the company hires strikebreakers, and that, when the strike is eventually settled, the unions are not able to get more than the re-employment of the strikers—that is, minus their former seniority standing. Thereupon the five men who did not go out on strike will be the five senior men on the new list, regardless of how far down they were on the old list. Furthermore, the first strikebreaker who was employed stepped into sixth place on the new list the instant he was hired—a position which on a sizable list would typically be held by a man of thirty or more years of seniority.

A further aspect of the seriousness of seniority loss or injury is revealed by the results of the court decisions in which seniority was the principal issue.¹⁸ In the first place, not only are damages not adequate for a continuing injury; but, in addition, it is extremely difficult to make the computation thereof sufficiently exact to satisfy a court. In the second place, the courts rarely recognize a seniority injury as deserving of equity proceedings and,

service should be placed in a position of inferiority to a limited number of men who have been employed as substitutes for these experienced railroad workers" [italics mine]. Fuller discussion of this strike can be found in various places: see *The Case of the Railway Shopmen* (a pamphlet by the Railway Employees' Department of the A.F. of L., n.d.); Harry D. Wolf, *The Railroad Labor Board* (Chicago: University of Chicago Press, 1927), pp. 214-15; Report of the General President of the Railway Carmen in the *Proceedings of the 15th Convention* (1925); *Decisions of the Railroad Labor Board* (Washington: Government Printing Office, 1922), III, 1139-41; and J. Douglas Brown, *Railway Labor Survey* (New York: Social Science Research Council, 1933), pp. 17-22.

A similar situation but on a smaller scale arose in a strike of the enginemen on the Western Maryland Railroad in 1926 (see *U.S. Senate, Hearings before the Committee on Interstate Commerce on Senate Resolution 207* [69th Cong., 1st sess.; Washington: Government Printing Office, 1926]).

The principle set forth in the above italicized phrase has been widely proclaimed for many years; e.g., see *Feeding the Iron Hog* (Cleveland: Brotherhood of Locomotive Firemen and Enginemen, 1927), p. 35.

¹⁷ Archibald M. McIsaac, *The Order of Railroad Telegraphers* (Princeton, N.J.: Princeton University Press, 1933), p. 255; see also Slichter, *op. cit.*, p. 154.

¹⁸ See the author's article, "Seniority Rights before the Courts," *op. cit.*

therefore, almost invariably will refuse to issue an injunction—the only appropriate remedy for a continuing injury such as a seniority injury or loss. And, finally, in addition to the fact that the courts almost invariably remind the complainant employee that the union is his representative in all matters pertaining to his working contract with the employer, they also point out that the union's settlement of all disputes of the members with the union or among themselves is final. In other words, the courts practically wash their hands of seniority disputes.

The employee is also denied, by reason of the National Railroad Adjustment Board's questionable interpretation of the law, the privilege of appearing *personally* before it. Even though his quarrel is with the union, it is the union who represents any employee—whether or not he belongs to that union, for the reason that the law says that the union shall bargain for and represent all employees before the employer.¹⁹ In summary, an employee who has suffered a seniority injury may find himself, for all practical purposes, without recourse of any kind.

Opportunity to obtain work with other employers or different work with the same employer is in reality a complementary part of security. While, on the one hand, seniority makes it necessary for an individual to seek employment less frequently, on the other hand, it reduces the number of employment opportunities.²⁰ Thus it may be seen that the presence of seniority operates to increase artificially the severity of the discipline of discharge²¹ and the seriousness of a mistake of any kind leading to termination of seniority. The seriousness is not made less by the fact that the railroad employer, in order to protect himself from the decided tendency of the seniority system to raise the average age of the working force to a dangerously high level, must lower the upper

¹⁹ While the National Railroad Adjustment Board is set up to handle only disputes between employees and employers, it may readily be seen that this qualification can be fulfilled in order to bring a dispute between the union and an employee before this board.

²⁰ The ratio of employment seekers to employment opportunities, however, is not altered by the presence of seniority.

²¹ Slichter, *op. cit.*, p. 154.

hiring-age limit;²² and any other employer will be reluctant to hire him when he is laid off, realizing that in all probability he will exercise his seniority with the railroad at the first opportunity.²³

The narrowing influence of seniority upon the development of the individual.—Because of the great seriousness of a seniority loss, an employee, once he has accumulated any amount of seniority, views things differently: his thinking, actions, and attitude toward work and life in general are influenced away from what they would have been. It not infrequently happens that an employee desires to change occupations. He may feel that he would be better fitted for another type of work or that opportunity for advancement elsewhere would be better, the pay higher, and so on. Or, again, he may want to live in a different section of the country for any of a multitude of reasons, such as the health of some member of the family. In all instances seniority serves as a deterrent to such changes. In many specific instances, no doubt, the contemplated change would have been ill advised; but, since there is nothing inherent in seniority which can indicate the wisdom of an employee's desire to change employers or occupations, it probably prevents as many wise as unwise ones. The argument might be offered that, if the individual really needs or is determined to change, he can do so. This is true, but the penalizing cost of the seniority loss is not in the least diminished.

While some persons seem to be able to live their entire lifetime within an extremely limited geographical area, type of work, and circle of human relationships without apparently suffering mental stagnation, others seem to require change in order to achieve and maintain a broad understanding of things and people.²⁴ Particularly does it seem that youth needs change. It is doubtful if an individual exhibits as much effort toward his own development

²² See "A Statistical Study of the Effect of Seniority upon Employee Efficiency," *op. cit.*

²³ Brown, *op. cit.*, pp. 105-6; see also Rountree, *op. cit.*, pp. 201-30, for discussion of employee mobility and unemployment as affected by the presence of the seniority rule.

²⁴ Alfred Marshall, *Principles of Economics* (8th ed.; New York: Macmillan Co., 1936), p. 197.

and general willingness to assume responsibility when he continues to live under the roof of his parents or work with the same fellow-employees or for the same employer. And, furthermore, his efforts in this respect are rendered less effectual for the reason that one's elders have a tendency to remember the mistakes and weakness of a youth rather than to recognize the results of his efforts toward self-improvement. Growth and recognition of growth come more quickly as a series of evaluations by different people rather than as re-evaluations by the same person; seniority greatly reduces one's chances of encountering "new faces and new places."

Summary and conclusions.—Employees should recognize that men differ in previous experience, ability to learn a particular skill, ambition, or willingness to apply themselves, and in many special qualifications such as health, personality, and education.²⁵ Man's reward to man cannot ignore differences in ability and willingness to produce, if the standard of living for society is to be as high as a given state of the arts will permit—or even if the state of the arts is to improve as rapidly as might be possible. By mere common sense it should be evident that seniority neither measures nor rewards a single one of the aforementioned qualities. It measures the length of continuous service with a given company, in a given department, at a given skill or trade—and nothing else; it is impartial only because it is impersonal and irrelevant.

The first principle of a wage theory should be that an employee receive his entire worth as he goes along rather than part of it in promises of job security in his old age. Particularly is this true if the security system is such that whatever part of the total cost which an employee may have paid toward such security stands to be forfeited for any of a number of reasons. Under the seniority arrangement, termination of employment for whatever reason (through a strike, for example, or decline in physical ability for any cause, as eyesight) can easily make it impossible for an em-

²⁵ Harold B. Bergen, in an address before the National Industrial Council (printed in *N.A.M. Labor Relations Bulletin*, December 28, 1937) on the seniority problem in industry, continually stressed the idea that employees, their representatives, and the employers must strive to determine, measure, and reward individual differences.

ployee to collect the security for which he has paid.²⁶ The only certain attribute of seniority is the price. If an employee sustains a seniority loss, that loss is utterly and absolutely irreparable; if he sustains a seniority injury, adequate remedy therefor, legal or otherwise, is practically impossible to obtain.

If an economic system which forces a man to work most of the time in order to eke out a mere existence is referred to as wage slavery, what term would be used to describe a system which penalizes the individual who fails to spend his whole working lifetime with a given employer, in a given location, and at a given trade or skill?²⁷

One reason why the unions have not bestirred themselves to find a better way of achieving the proper kind and degree of general job security for employees is that the latter have not done enough thinking for themselves. After all, leaders must be partially driven by their constituencies—the people of France must bear a great share of the blame for the lack of foresight and patriotism on the part of their leaders.

An applicant with experience usually is more able than a beginner, but in a seniority industry he must start at the bottom with the beginners and can progress little if any faster than they. For this reason an experienced individual should seek employment only from a nonseniority firm; there he will have a better opportunity to start at a level equal to or better than that which he left.²⁸ But if his work is of such nature that his experience is of little value in a nonrailroad industry (train and engine-service

²⁶ This does not conflict with any old age security plan in which a portion of the current earnings of an individual are irrevocably earmarked for *his* old age needs.

²⁷ "Beware of Seniority Provisions," *Industrial Commentaries*, I, No. 3 (1940), 87. The pamphlet is concluded with a quotation from a statement by William S. Knudsen to the effect that, if all the employers in a working area have the seniority rule, ". . . the man is practically becoming a serf to the company that gave him his first job." See also *Report of the Eight-Hour Commission* (Washington: Government Printing Office, 1918), p. 311, and National Industrial Conference Board, *Conference Board Service Letter* (September 30, 1939), No. 9 (New York: The Board), pp. 69-72.

²⁸ The principle applies with equal validity to the beginner who feels himself sufficiently able and ambitious to increase his proficiency more rapidly than other individuals.

employees, as examples) a seniority loss of, say, fifteen years constitute a handicap which he can never overcome.

SENIORITY AND THE EMPLOYER

In one respect it is illogical to consider seniority from the point of view of the welfare of first one group and then another, because in the long run neither the employer nor the employee can prosper while the other suffers, nor can both gain for a great length of time at an undue expense to the general public. The evaluation is so divided here, however, in view of the fact that, in the short run, one-sided advantages are possible and also because different facets of the same seniority problem are, by custom, of greater interest to one side or to the other.

Divisions of interest and of conceptions among employers regarding seniority.—There is a difference of opinion among railroad officials as to the advantages of seniority. Officials who work with the employees and their seniority system tend to be favorable toward it, while officials whose duties lie nearer the field of policy-making are more apt to be critical of the system.

This difference of opinion may be due to the fact that the latter group, being farther removed from the actual administration of seniority, are enabled thereby to look at it with some perspective; whereas the first group, being themselves the administrators of the system, not only lack the opportunity to view the system in perspective but also have had less training in policy formulation. They may also see the tacit acceptance of the seniority system in the official ranks as being the best assurance of their own continued progress. Again, such typical remarks as "one man is as good as another," "all a man has to do is to obey the rules," reflect a belief that their direction, supervision, and control are of such caliber that the quality of employee performance cannot be otherwise than uniform. Indeed, it is perfectly possible to subdivide tasks so finely or to make an estimate of a day's work so low that quality of performance can be high and the employees will appear to be equal in ability.

And, finally, there is the possibility that this difference of opinion rests upon a division of interest: that is, the officials who are

directly responsible for the administration of the seniority system may consciously or unconsciously realize that, if job allocation were to be determined on a merit basis, not only would their duties be heavier, but they would also be constantly accused of showing favoritism and discrimination. On the other hand, they may feel that, if the administration of the merit system were to be placed in other hands, a decrease in their own authority and position might result.

As will become more evident later, seniority has two advantages to the employer which must not be lightly considered. First, and of inestimable importance, is the fact that the employees, in the main, are satisfied with seniority.²⁹ And, second, in spite of the great extent to which the seniority rules occasion an irritating and unnecessary amount of shifting about of employees in order to fill even a single vacancy and in spite of the general complications which beset the company and the union when certain unforeseen situations arise, its direct or apparent costs of administration are low. The hidden or indirect costs, however, are a different matter and will be the subject of discussion in this section.

The direct effect of seniority upon the efficiency of an employee.—It was found from the data in the preceding article³⁰ that, up to a point, employees of higher seniority are more efficient than those of lower seniority, but beyond this point the reverse is true. Since this relationship was found to hold even within a given five-year age group, it is evident that seniority is a separate and direct influence upon efficiency and is not merely the reflection of the effect of age upon efficiency operating through the fact that one cannot accumulate an additional year of seniority without getting a year older.³¹ This is the direct effect of seniority upon efficiency.³² Since within a given age group the efficiency curve rises

²⁹ For this reason alone, a merit system which is not devoid of favoritism and discrimination and which does not have the confidence of the employees would be less successful than a seniority system.

³⁰ See "A Statistical Study of the Effect of Seniority Upon Employee Efficiency," *op. cit.*

³¹ See pp. 404-5 for the description of a study in which the effect of seniority and age upon efficiency are not separated.

³² In a similar manner seniority can be held constant while the direct effect of age upon efficiency is noted.

and then falls, depending upon the amount of seniority, the indication is that the effect of a given amount of seniority upon the efficiency of an employee depends upon the age-at-time-of-hiring of that individual. It also follows that seniority prevents the efficiency of an individual from reaching the peak of which he is capable. And, finally, it is inescapable that there is a "morale curve" which is the cause of and is reflected by the efficiency curve.

The fact that the effect of seniority upon efficiency, when determined from a cross-sectional study of a group of employees, fails to take into consideration those employees who have ended, or begun and ended, their employment with the company during the time that the present employees have been working poses the question of how and to what extent the results of the study would have differed if the records of these individuals had been included. This question is not so difficult as it might at first seem to be.

The results of the data for those who have passed out of the picture would need to behave in exactly the opposite direction and amount in order to offset the trend in a group of "present" employees. Such behavior would be extremely unlikely for several reasons. In the first place, an overwhelming majority of those employees who have separated from the company during the time that the senior employees have been with the company did so by reason of force reductions which lasted long enough for those laid off to lose their seniority. One may safely assume that most employees who left the company for this reason had little seniority for the reason that most employee separations occur within the first few years. Such ex-employees would be included on the rising side of the efficiency curve, and, therefore, their efficiency records could not alter the falling side of the efficiency curve as determined by the "present" body of employees except by having affected the slope of the incline.

Those who were lost by layoff, since no selection or sifting by the employer is possible under the seniority system, would not be different from the present employees in their susceptibility to seniority, and, therefore, their records would not alter the efficiency curve as established. The efficiency records of those who

were discharged and those who quit in order to avoid being discharged would, if anything, accentuate the curve because, on the average, they would have failed to improve as rapidly or as much as those who were retained. No doubt, some employees quit because they thought opportunities would be better elsewhere. What effect the inclusion of their records would have upon the efficiency curve is difficult to say—probably no general effect. And, finally, those who retired yesterday probably were little different from those who will retire tomorrow.

All in all, it seems to be a fair assumption that, if the study had included the records of all the employees who have worked for the company in the shop-craft services during, say, the last forty years (roughly the seniority of the longest service man now working), the results of the study would not have been different in principle, and, therefore, the conclusion that seniority is a factor which is directly deleterious to the individual's efficiency remains valid. There is no reason to assume that a different principle applies to employees in other crafts.

In the present article, therefore, the problem becomes one of determining why it is that under the seniority system employee efficiency, on the average, not only fails to increase as much or as long as it should but, after a time, actually declines. It will be recalled that an employee chooses the better-paid jobs just as rapidly as his seniority permits and that, in general, these jobs are more difficult ones.³³ If this rate of advancement were not so snail-like, it might be argued that after ten years or so advancement comes too rapidly for an employee's efficiency to keep pace. A more likely view is that a system which decreases both the necessity of and the reward for competing for advancement³⁴ in the process of decreasing favoritism and discrimination and which re-

³³ Of course, there is a wide range of difference of opinion among employees as to what constitutes a preferred job in a given seniority district: nearness to one's established home, good schools, or a desirable town; high rate of pay; pleasant hours; agreeable amount of work and responsibility; etc. But it seems logical that the rate of pay or total wages is a major item in all combinations of considered factors.

³⁴ It is evident that any gain from decreased competition of a fair character is not one of increased production. Whether there follows a social gain which is worth this cost will be considered in the following section.

duces the likelihood of job loss by making such a loss commensurately greater can scarcely be rated as an incentive system. It could not easily instil in the employee's mind an attitude other than that of being "tied to the job."

The indirect effect of job allocation by seniority upon efficiency.—In the majority of agreements the seniority rule states that "merit being equal, seniority will prevail." In perhaps 95 per cent of the applications of this rule ability is interpreted as equal, whereas, in actuality, the reverse would be as near the truth.³⁵ Whenever two men appear equal in ability, one or more of the following reasons will explain that pseudo-equality: (1) There is not sufficient desire to find a difference in ability due to the expense or difficulty attached thereto; (2) the quality or quantity of performance demanded is so low that individuals of a wide range of ability and willingness can appear fairly comparable; (3) there is little incentive for the employee to be more than average in either quality or quantity of performance since progress is determined by the rate of labor turnover. As employees often remark—with considerable truth—when someone gets promoted or is able to bid in a better job, "somebody died."

If there are two employees who desire a certain vacancy—or whatever the job-allocation situation—there cannot possibly be over a fifty-fifty chance that the senior one of the two is the better qualified on the basis of efficiency. If they are only a few days apart, it would be absurd to believe that those few extra days could accurately indicate the more meritorious of the two employees. Suppose that there are three employees who wish to fill a given vacancy; seniority could point out the best fitted only one-third of the time. The only scientific aspect about seniority is its method of measurement—sometimes a matter of minutes. Seniority is a striking illustration of the use of a crude tool for precision work—imagine railroad men telling time by the sun.

In many agreements the seniority rule reads: "Ability being

³⁵ National Industrial Conference Board, *Railroad Wages and Working Conditions* ("Research Repts.," No. 46 [New York: Century Co., 1922]), p. 6; see also James O. Fagan, *Labor and the Railroads* (Boston: Houghton Mifflin Co., 1909), p. 53.

sufficient, seniority will prevail." Sometimes the rule requires that an individual's sufficiency can be declared only after trial. The "ability being sufficient" wording is merely the result of efforts to bring the language of the rule in closer conformity to what has more and more become the interpretation of the earlier wording, "ability being equal." However, the evolution in that interpretation is in itself evidence that the senior applicant has not always been the best man for the job; so that the justification for allocating positions on the basis of seniority has been shifted gradually from "efficiency" to a sort of "seniority property right."

The indirect effect of seniority upon efficiency resulting from its influence upon the identity of the working force.—The seniority system, by its elimination of layoff and recall on a merit basis, makes it impossible for the employer to get rid of "mistakes" in hiring, except by discharge. And in this connection it should be remembered that the presence of the seniority system so radically heightens the severity of the discipline of discharge that it is less frequently used.

Then, too, since seniority is an inducement for the men to stay with the company, the average age of the working force is gradually but enormously increased. It has come to be generally considered that the lower the rate of labor turnover, the higher the efficiency of the working force. In reality, it seems very certain that too low a rate of labor turnover is also a diseconomy. Particularly is this true under a seniority system, because as men grow older their abilities change either in amount, character, or both, and yet the seniority rule, to a great extent, prevents the employer either from so placing his employees as to maintain a match between their abilities and their jobs or from disposing of them altogether in order to hire a sufficient number of younger men to maintain a balanced age distribution in the working force.³⁶

³⁶ The most populous fifteen-year age group among railroad employees in 1925 was twenty-five to forty; in 1930 it was thirty to forty-five; and in 1934 it was thirty-five to fifty. In 1925, 16 per cent of all railroad employees were under twenty-five years of age; in 1930 this percentage had fallen to 11, and in 1934 to less than 3. On the other hand, in 1925, 15 per cent of all railroad employees were above fifty years of age; in 1930 this percentage had risen to 20, and in 1934 to 30. This is

Thorndike estimated that age decreases efficiency at the rate of 1 to 2 per cent per annum between the ages of fifty and seventy-five, especially in jobs requiring speed and energy.³⁷ However, differences among individuals of the same chronological age are often quite marked.³⁸ The decline in efficiency as age advances ought not to be of much consequence if the job requires no great speed or energy or if a man's judgment increases sufficiently to compensate. While some men seem merely to grow older, probably the ablest of individuals, unless the physical requirements of the job are too heavy, are old men who have retained the progressive spirit of youth. The peculiar contribution of the young is that they constantly and forcefully keep this quality before the attention of the older men; on the other hand, the latter continually impress upon their juniors the value of sober consideration and attention to duty.

Since both age and seniority directly affect the efficiency of employees, it is logical that the description, in age and seniority terms, of the employees who, typically, are average or better in efficiency must be in terms of a combination of these factors; to measure it in terms of one factor only is to include both too much and too little. The proper basis of measurement is as follows: if the sum of an employee's age and seniority is more than 33 and less than 60, he is, typically, above average in efficiency. Translated into a hiring-age range, these employees who now are average or better in efficiency, typically, were hired between the ages of twenty-one and thirty-five, inclusive.³⁹

The effect of age and seniority upon efficiency as shown by merits and demerits.—An attempt was made to determine from a study

adapted from a table in the *Report of Federal Coordinator of Transportation, 1934, House Doc. 89* (74th Cong., 1st sess. [Washington: Government Printing Office, 1935]), p. 81. See also the co-ordinator's *Railway Traffic Organization Report* (Washington: Government Printing Office, 1935).

³⁷ Edgar L. Thorndike, *Human Nature and the Social Order* (New York: Macmillan Co., 1940), p. 55.

³⁸ W. R. Miles, "Abilities of Older Men," *Personnel Journal*, XI, No. 5 (February, 1933), 352-57.

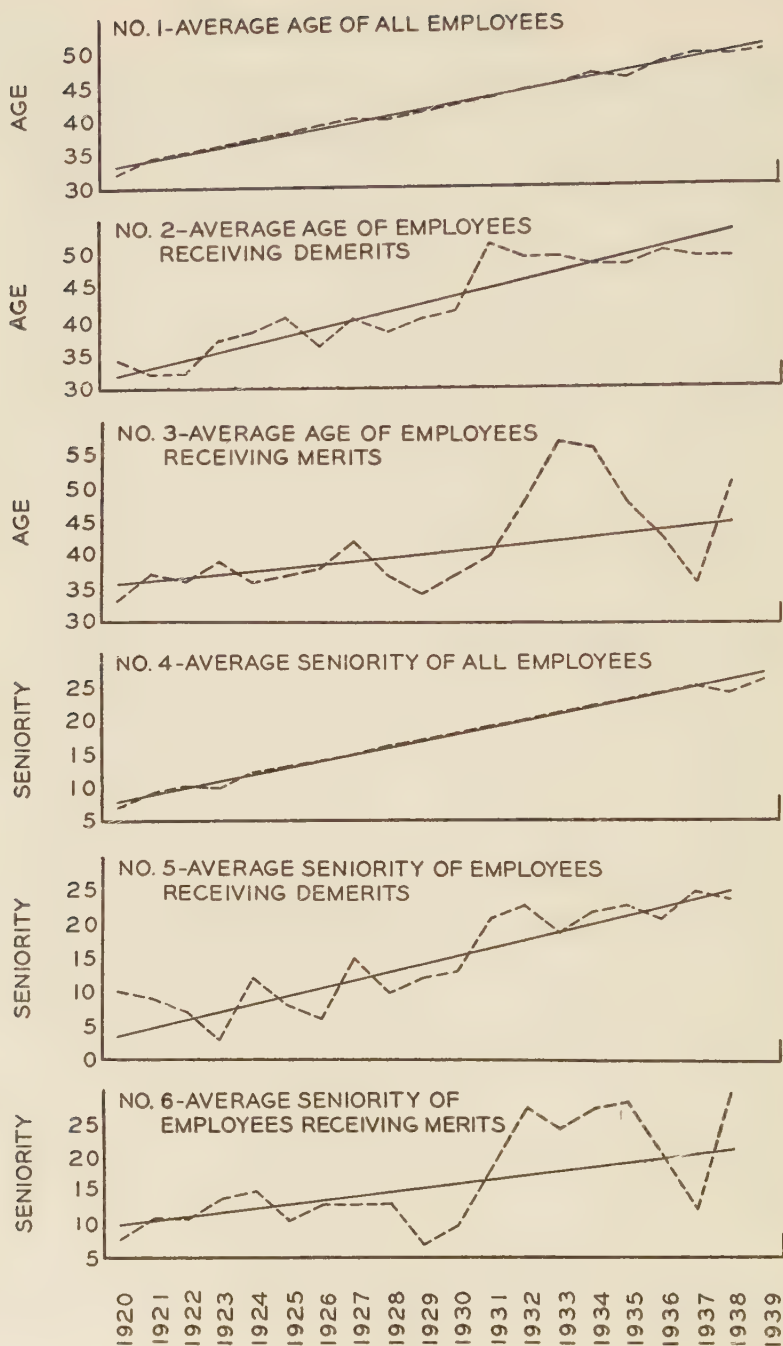
³⁹ A study of another group of employees might yield somewhat different figures, but it seems improbable that the principle would be invalidated.

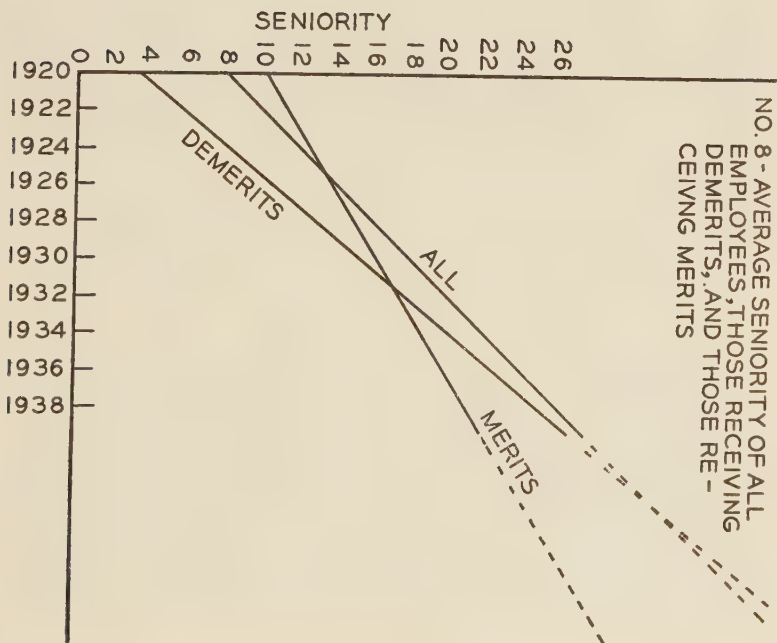
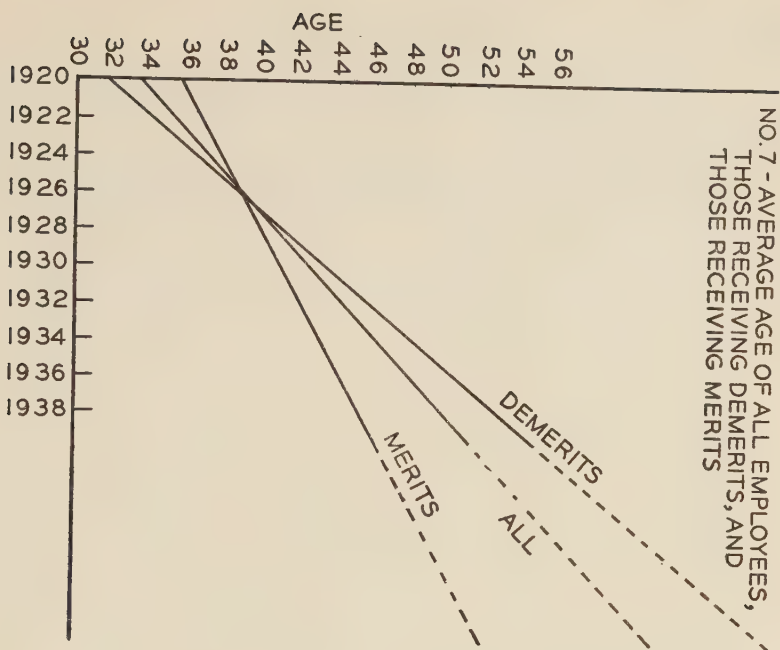
of the personal record files of a certain railroad the effect of seniority or age or both upon the efficiency of employees, by comparing within each year from 1920 to 1939, inclusive, the average age of all employees with the average age of those who received demerits and with the average age of those who received merits.⁴⁰ For example, in 1920, the average age of all employees was about 33.5 years, the average age of those who received demerits was about 31.5 years, and the average age of those who received merits was about 35.5 years. The same three groups were also compared on the basis of average *seniority* for each of the years.

Charts 1-6, inclusive, present the unsmoothed and smoothed curves of average age and average seniority for each of the three groups: all employees, those who had received demerits, and those who had received merits. The unsmoothed curves are presented in order that the reader may check the smoothing, if he wishes. In Chart 7 the smoothed age curves for the three groups are assembled, and in Chart 8 the smoothed seniority curves are brought together. In both Charts 7 and 8 it may be seen that the curve which is made up of the average for employees who received merits rises less steeply than does the average for all employees; and, in turn, the average for all employees rises less steeply than the average for those who received demerits.

It should be noted, however, that the average age and average seniority of those who received demerits are not continually greater than the average age and average seniority of all employees or of those receiving merits. Those who received demerits are younger in age and seniority than those who received merits *only* when the average age or average seniority is low. But the average-seniority line and the average-age line of those who received merits and those who received demerits cross each other when the average age and the average seniority become high. They cross each other at age thirty-nine and seniority seventeen. Too much significance must not be attached to the location of these crossing-

⁴⁰ See p. 388, n. 10, for a description of the method which was used to combine a 2 per cent sample of the live-file employees with a 2 per cent sample of the dead-file employees, in order to obtain the average age and average seniority of the employees for each year from 1920 to 1939, inclusive.





points, however, because the data are insufficient for the drawing of so fine an inference.

It is also important to note that one cannot determine from this study the separate effects of seniority and age upon efficiency. All that can be said is that both the merit and the demerit records show that, after a certain average age or average seniority has been attained, those of higher age or higher seniority, as a group, compare unfavorably with employees of average age or average seniority.

Summary.—Seniority deleteriously affects the efficiency of the employees and, therefore, detrimentally affects⁴¹ the interests of the employer in three fundamental ways: (1) It causes the efficiency of a given individual to be less than it ought to be. (2) It acts to allocate men to jobs, virtually irrespective of their relative efficiency. (3) It removes layoff and recall on merit basis and discourages discharges and quits, thereby hindering the employer's opportunity to maintain an advisable age distribution and to prevent that general deterioration of work habits which so frequently results from having been in the same place too long.

These generalizations are supported by the following findings: (1) Typically, the sum of the seniority and age of an employee who is average or better in efficiency is between thirty-three and sixty, inclusive. (2) The average age and average seniority of employees receiving merits have been rising less rapidly than the average age and average seniority of all employees. On the other hand, the average age and average seniority of employees receiving demerits have been rising more rapidly than the average age and average seniority of all employees.

SENIORITY AND SOCIETY

In evaluating an institution, several considerations must be borne in mind. (1) Society includes not only those who are directly affected but also those who are indirectly concerned. (2) Society includes not only those who are now living but also

⁴¹ Slichter (*op. cit.*, p. 154) thinks that seniority is partly responsible for the strong interest in make-work rules, such as laws limiting the length of trains, because such requirements enable a large proportion of the employees to move up to a better position.

those who will be here tomorrow. (3) The greatest good may or may not be on the side of the majority. Intensity must also be considered; an institution which harms two people only slightly but which aids another person vitally, other things being equal, is justifiable. (4) Value is a relative term, relative to both the advantages and the disadvantages of alternative institutions.

In the evaluation of seniority thus far, the welfare of the employees and the employers has been specifically and separately considered. By subtraction it might seem that the welfare of all other people should be surveyed in this section. But the welfare of any specific segment of society cannot be fully considered as a thing apart. There comes a time when each of the parts must be studied in relation to the whole. And, finally, there is posterity.⁴² Any analysis of an institution, such as seniority, must not be made only from the point of view of the welfare of those who are now living, because the welfare of the people of tomorrow will depend to an indeterminable degree upon the sanity of the social institutions which they inherit.

Seniority and other time-priority institutions of social control.—As a background for this general and social phase of the evaluation, nothing is more revealing than the parallels between seniority and certain other institutions which have been or are still in use. Primogeniture, apprenticeship, turn-taking, veneration of elders, and seniority, although they vary as to their specific uses and points of application, are fundamentally similar: in each of them some form of time-priority is the criterion which differentially determines the extent and sequence with which men may receive of the world's goods and man's trappings.

A lesson in determining superior-inferior differences among individuals must have been learned quite early in man's evolution. Today when people peacefully form a queue before a ticket window, for example, they do so ostensibly because of custom and courtesy, but in reality, as Carl Van Doren once remarked, because there is something about taking turns which strikes men as being fundamentally fair. Early man probably arrived at the

⁴² J. M. Clark, *Social Control of Business* (Chicago: University of Chicago Press, 1926), p. 73.

same answer in similar situations but for different reasons. It must gradually have become evident that, when several people approached a spring at which only one could drink at a time, there was little to be gained by competing: only a few would be able to drink at all if the competition became intense. Therefore, the very desire for security or surety of drinking would have caused them to allow each individual to drink undisturbed. Just as man does not compete for free goods, so he competes for other goods only to the extent that the gain from so doing is worth the effort, and he combines when it is not.

The turn-taking of the seniority system would seem to indicate either that the incentives offered by industry are insufficient or that the particular men employed are relatively unambitious and, therefore, require greater incentive to stir them or, again, that the security or surety of obtaining extra reward for extra effort has so often failed to materialize that the trust of employees in competition has been killed.

Consider, second, the institution of apprenticeship. Since early times the length of an apprenticeship period has been set with the idea of regulating the number of journeymen.⁴³ The time necessary to learn the trade has nearly always been of secondary consideration, and even at best an apprenticeship period of set length could correspond only to an average rate of learning—offering little immediate reward for extra effort. Other than the lengths of time involved there is little difference between progressing from apprentice to journeyman in a definite length of time which is indirectly based upon the employee attrition rate and progressing in a seniority system toward more desirable jobs at an indefinite rate which is directly determined by the employee attrition rate.

The institution of primogeniture was designed for the purpose of perpetuating the family holdings and thus the prestige of the family name.⁴⁴ In spite of the fact that it is not always the first-born child who is most able, the system was long and widely retained because it was believed that the process of choosing the

⁴³ In addition, of course, unions have found it expedient to limit the number of apprentices.

⁴⁴ This system also had certain military implications in the feudal system.

most able of the children would end in family strife and division of the property. The particular point of parallel between primogeniture and seniority is that both are simple and objective and, therefore, admit of little dispute. Primogeniture was retained as long as the tradition was strong enough to prevent a general questioning of the justice of a system which retained the name of a family at the expense of the cruelty of pauperization of all but the first-born of each generation of that family.⁴⁵

The institution of veneration of elders⁴⁶ resembles the seniority institution particularly in regard to the subject of authority relationships: the gradations in the latter instance merely being finer and more definite, the control more positive, and the criterion of selection in many respects as fully one of time-priority.

Veneration of elders was probably the first general system of social control to succeed that in which the sole determinant was physical strength; it developed from the recognition that age has a specialized value.⁴⁷ An appreciation of judgment—the peculiar ability of old age—probably developed early in every society simply because old men have long memories and, therefore, would be more likely to have experienced and remembered the solutions of problems which could not be solved by physical strength and which would be unique in the experience of young men.

Since man's most important relationship is social and since man's most important social relationship is that which exists between the leader and his followers—which includes all intermediate levels of the leader-follower relations—the addition of a second criterion of human value can scarcely be overestimated. Such an addition altered the basis for the determination of superior-inferior differences and the concomitant relationships of superordi-

⁴⁵ See Adam Smith, *Wealth of Nations* (New York: Modern Library, ca. 1937), p. 362.

⁴⁶ In the discussion on this subject the author has drawn heavily upon Gunar Landtman, *The Origin of the Inequality of the Social Classes* (Chicago: University of Chicago Press, 1938), and Nicholas J. Spykman, *The Social Theory of George Simmel* (Chicago: University of Chicago Press, 1925), pp. 95-115.

⁴⁷ Age and sex are thought to have been the first of such values to have forced themselves upon the consciousness of man; but sex as a criterion of distinction can be dismissed from the discussion because it is not an accomplishment.

nation-subordination. Previous to such an addition, the leaders could only be young and they would change rapidly: afterward, leadership could be and was attained by older men. Owing to the fact that early man had no method of measuring judgment objectively, he was forced to accept the generalization that judgment of all men improves until dotage. This constituted the first step toward the establishment of the institution of veneration of elders.

Credence in the generalization was made easier by a group of basic human reactions. First, it would be only natural that the younger of two individuals such as father and son, friends, etc., would seek to shield the other when the effect of age began to weaken the older man's ability to meet some of the more difficult physical situations. Second, probably it has always been true that one's admiration for one who has stood well the vicissitudes of many years is based upon the hope that one may be able also to meet with like success. Third, there is the power of habit: from birth one is controlled and taught by one's elders. In early societies one's life was spent in the same tribe; consequently, those who were one's elders in youth continued to be so as long as they lived. Fourth, it is human nature not to wish to admit a decline in one ability unless the increase of a more important one is evident. Fifth, a man is less inclined to feel self-conscious in the presence of one more successful if he believes the difference to be attributed to some chance factor such as age or seniority. This is a corollary to the axiom that man is more willing to be subject to a law or impersonal principle than he is to an individual. This fact has been recognized and capitalized upon by the elders of all nature peoples: one of the principal purposes of initiation rites marking the entrance into manhood was to bring the young men thoroughly under the control of the old men.⁴⁸ Sixth, no one likes to see someone else progress faster than he did himself. This feeling is also expressed in the attitude that the newcomer should

⁴⁸ The institutions of heredity and money comparatively early enabled an individual to command the impersonal prestige of his office or wealth even though he lacked the values necessary to command personal prestige. Much of the prestige which an older man or senior individual commands is of this same impersonal variety.

prove his worth by the same ordeal. This might also be described as illustrating the desire and effort to achieve security not only in the present but also to the fulfilment of whatever is considered as the "established expectation." For example, an individual, who under the seniority system has paid the price of accumulating seniority, is very anxious not to see the system change—at least not until he has collected his reward.

It should not be assumed that a system of authority relationships based upon the institution of veneration of elders or upon any other institution of social control is solely one of command-obedience enforced by reward and discipline. Every subordination shows both opposition and submission. Leadership is never completely active, and followership is never completely passive. There is an interaction which amounts to a kind of co-operation. This interaction is particularly apparent in a class-status society, in the institutions of veneration of elders, turn-taking, and seniority, by reason of the fact that in each of them the authority relationships filter downward in army-command fashion. All levels of command or status are willing to see the status quo maintained, that is, each group is willing to remain subordinate to the one above in order to remain superior to the one below.

Some social problems of personal competition.—Generalizing from the material just presented, seniority is one of a family of traditions which enables older people to avoid all-out competition with the younger ones, to hold or even to improve their position in life long after their age or seniority has reduced their efficiency below the requirement of the job and the capabilities of other people.⁴⁹ A system which permits such uneconomical allocation of human resources cannot be to the best interests of either the

⁴⁹ Representative Collins, the outstanding military expert in Congress, in his article, "WANTED—for the American Army: Youthful Leadership and Promotion by Merit," written expressly for the *Reader's Digest* (XXXIX, No. 231 [July, 1941], 12-17) states: "In the army, largely because of the method of promotion of officers by seniority, those qualities [enterprise, vision, aggressive and creative efficiency] are penalized. . . ." One of his recommendations is the complete abolishment of the seniority rule and the making of promotion dependent wholly on merit. See also the quotation from Hugh Drum in *Time*, XXXIV, No. 20A (November 18, 1940), 22-23, and also Webb Waldron, "Internes in Government," *Reader's Digest*, XXXIII, No. 197 (September, 1938), 13-16.

employee or the employer group; and, more important, any institution which a given individual is powerless against and yet which renders his rate of success dependent principally upon his passage through life, is a distinct menace to the state because a lower rate of improvement, if not stagnation and decay, is likely to result.

Any improvement in the seniority system can come only as a movement away from it. And the only reasonable course is toward a merit system. Cooley has defined seniority as a kind of status unconnected with inheritance;⁵⁰ concerning status in general he stated the ageless truth that its only alternative is personal competition, and any diminution of the intensity of competition is inevitably accompanied by an advance in the alternative principle of status.⁵¹ Obviously, true freedom can exist only to the extent that status does not exist: freedom means the opportunity to rise or fall in accordance with the comparative value to society of one's efforts.⁵² Since there seems to be no way of giving opportunity to the fit commensurate with their ability except at the expense of the unfit,⁵³ any substitution of a merit or competitive system for that of status-by-seniority will result in greater day-by-day insecurity for all.

Although more competition would increase production, the lower prices, higher wages, and higher profits which would result therefrom would be of secondary importance to the larger problem of general human advancement. In other words, a standard of living cannot be measured alone in terms of output of goods and services,⁵⁴ and human efficiency must not be measured alone in cents per unit of output. If insecurity were inherently evil, a higher standard of living might be obtained by lowering produc-

⁵⁰ Charles Horton Cooley, *Sociological Theory and Social Research* (New York: Henry Holt & Co., 1930), p. 165. See also "Seniority Rights in Labor Relations" (reprinted from the *Yale Law Journal*, November, 1937, in the *Train Dispatcher*, XXI, No. 6 [September, 1939], 381) and the Foreword by J. Douglas Brown in the pamphlet by Frederick H. Harbison, *op. cit.*, p. iv.

⁵¹ Cooley, *op. cit.*, p. 170.

⁵² Clark, *op. cit.*, p. 71.

⁵³ Cooley, *op. cit.*, p. 217.

⁵⁴ J. Raymond Walsh, *C.I.O. Industrial Unionism in Action* (New York: W. W. Norton & Co., 1937), pp. 230-33.

tion, decreasing efficiency, or increasing leisure time. But, contrary to a widespread notion, insecurity is not necessarily a bad thing. In fact, it is the absence of it which is dangerous. Clark has formulated the principle that distinguishes good and bad insecurity (in kind and degree) as being "the kind which invites us to do something about it, and gives us a chance to make that something effective."⁵⁵

This is not to say that there are no disadvantages to personal competition, even though it is of a fair nature. A return to the competition which is the essence of a true merit system would cause the recurrence of problems which have been "solved" by seniority:

1. The difficulty of measuring human efficiency as the basis for a merit system is not to be considered lightly.⁵⁶

2. The complete and continued elimination of favoritism and discrimination would be difficult but absolutely essential.

3. Even though the system may warrant the confidence of the employees, more than that, that confidence must actually exist.

4. The opportunity for competitive gain will encourage a few individuals to work harder than a long-run view of their own health would justify, and, in turn, others will be forced to follow suit unless such an evil is obviated.

5. The spirit of fellowship which some believe exists only by virtue of seniority should be preserved.

6. The fate of older workers who have become less fit has serious socioeconomic implications, especially in times of low employment.

The first three problems can be discussed as a group since little can be offered of more than a general nature in this study. The difficulty of creating a substantially accurate method of determining the "best man" in every job-allocation situation would be matched only by the value of such an accomplishment. While favoritism and discrimination, by definition, have no place in a merit system, in actual practice it is very difficult to eliminate them. Even though the company were successful in preventing such practices, it seems that the employees, by the right of self-determination, should have not only the right but the duty of

⁵⁵ *Op. cit.*, p. 76.

⁵⁶ *A Study of Seniority in Collective Bargaining Agreements* (New York: Bureau of Personnel Administration, 1940), p. 107.

aiding in both the creation and the administration of such a system. The railroads probably have reached the apex of efficiency which is attainable where the collective bargaining is not based upon a true spirit of co-operation.

There are always a few individuals who are extremely efficient because either they have exceptional ability or they are willing to work beyond their capacity to their ultimate physical undoing. For management to capitalize upon such performance, in the formulation either of wage scales or of the concept of a day's work, is bound to arouse a justifiable resentment among the employees. However, the pace-setter nuisance can be largely obviated when the collective bargaining is between enlightened parties.

It is often declared that seniority creates a spirit of fellowship which is conducive to employee efficiency and therefore beneficial to the employer. It should be observed that there is intense rivalry for position on all sports teams. In fact, the very essence of all sports is competition. Imagine a baseball team composed of players who hold their positions by seniority. What a hue and cry would be raised by the fans—many of whom insist upon seniority-determination of the positions which they fill in a vastly more important activity. It would seem that the spirit of rivalry and sportsmanship is no more possible or valuable than competitive-work performance and fellowship. Perhaps the rules in the workaday world are not so highly developed or the umpires so excellent as are those for games or sports.

One of the most important phases of the problem of job insecurity is the fate of the older worker. Since all men, as far as they know, will face this period of life, the problem is real to all workers. Unless a man improves or modifies his ability, he is quite likely, under a merit system, to face a gradual decline in his earning-power after middle age. This is somewhat more likely to be the case, the greater the significance that physical ability occupies in the brain-brawn ratio of his job. However, a change in the state of the arts often is of greater moment than the decline in physical ability. In fact, it seems as though the rate of change in some lines of endeavor has increased to such an extent that the day is past when a man can expect, with any certainty, to be able to

earn an increasingly better living or even the same standard of living at a trade or profession which he learned in his youth. Some trades disappear completely within a normal lifetime, others change radically. A doctor of yesterday, should he return, would find his knowledge and technique distinctly inadequate when compared with present-day training.

Earlier in this article consideration was given to the question of which age group of employees can, with the least hardship, shoulder the burden of unemployment. Here the question is what age group of employees would be the cheapest for the public to support in unemployment. In general, the seniority system gives the older workers more and better employment than they would obtain under a merit system.⁵⁷ This is tantamount to saying that during a depression the relief rolls would have fewer young and more old men if jobs were allocated on the basis of efficiency rather than seniority.⁵⁸

It is obvious that, if unemployment is unavoidable, the public's burden of supporting the unemployed group would be less if it were composed of the least efficient. Under the seniority system unemployment is concentrated among the junior and, therefore, the younger employees; however, "juniority" often extends into the prime of life because ten to fifteen years of seniority are generally necessary to protect one against layoffs. Under a merit system there would be less concentration of unemployment upon a single age group. Instead, it would be concentrated on two groups: the inexperienced and the old. If unemployment is unavoidable, the burden of supporting the idle will be less and more easily carried by the most efficient.

There is also the factor of revolution. Revolutions spring from class consciousness. It seems that there would be more inclination among unemployed men in their twenties and thirties to revolt against a general denial of opportunity than there would be

⁵⁷ Again and again it should be reiterated that an old man who has retained the progressive spirit of youth is a most valuable individual. And, also, age should never be held against a man—the only socially honest test of a man's worth is his performance.

⁵⁸ See Norman G. Shidle, "Where Is Seniority Taking Us?" *Forbes*, January 15, 1940, pp. 20-21.

among either the inexperienced or the old or both. On the other hand, an age-class-conscious group of old men could do little more than vote into existence "ham and egg" schemes—although such occurrences would be serious enough. If unemployment is unavoidable, at least it ought to be concentrated among those least dangerous to the state.

There is an extremely important psychological problem which must be considered in determining the fate of the older worker. Under the seniority system a man is largely spared the decline in earning-power and general loss of prestige which would occur to a great many men under a merit system. But can society afford to grant to all men the psychological victory of apparently continuing to become more valuable as they grow older? If it were a matter merely of dollars and cents, perhaps such a gesture would be justifiable; but, when it is at the expense of postponement of youth's opportunity for employment and retardation of their progress for many additional years, it is very much less defensible.

The growing tendency to get rid of the employee, inefficient because of his age and seniority, by retiring *all* men at a given age is more of an evasion than a solution of the problem. No man should ever be retired by reason of age alone, because age is too rough a generalization upon which to base the value of a human being.

General summary and conclusion.—Sufficient evidence, it would seem, has been marshaled to demonstrate that seniority, as it gradually envelops the lives of all people in a society, will at length cause an individual's success or progress to become almost entirely a matter of growing older. This type of status, which means the willingness to let time bring what it will, is fully as dangerous as status by birth. Since seniority first became a settled policy on the railroads, improvement in nearly every field of endeavor has occurred; is it not, indeed, time to institute a more scientific way of determining who shall work and at what job? Nowhere is justice more important than in the day-by-day work and life of a man. The unions should shoulder a degree of responsibility commensurate with their authority and thus gain for the employee the right to participate in this, his self-determination.

